

CASE CATALOG  
1916



# CASE



**J.I. CASE**  
**THRESHING MACHINE CO.**  
INCORPORATED  
**RACINE, WIS.,**  
**U.S.A.**





# Introductory

**G**REAT changes are taking place in the methods of farming. The old ways of doing things must be abandoned. It has been said that in agricultural history the decade from 1910 to 1920 will be marked as the era of the development of farm power. Previous decades have demonstrated the necessity of mechanical over human power. As our descendants look back they will see only the logical extension of those factors which revolutionized the manufacturing industry into the greatest of all industries — farming.

Power is fundamental. To keep in step with progress the farmer is rapidly realizing that he *must* apply mechanical power to his farming.

The same business problem confronts you, therefore, that confronts any business man, viz., that of getting what best suits your requirements at the least cost. It is not an easy thing to determine, because that which may seem to you to be the cheapest source of power is often the most expensive. This is possible for the very simple reason that the better machine will last longer and do better work, with less cost of repair and maintenance, over a period of years. And it is over a period of years that you must judge the worth of a machine.

So each season finds more and more farmers purchasing Case machinery, because they believe in buying from a concern whose reputation stands back of everything bearing its name. This name to them is a guaranty of a wise investment. The faith of this company with the American







farmer has never waned. As a result of these years of straightforward business, the past year has been our most prosperous year, and the future stands before us with even greater possibilities. This is due primarily to the excellence of our product and the faith which this excellence has inspired in the purchasing public.

During the next few years you are going to see great changes in the methods of American farming. The good, small gas tractor has demonstrated its worth. You notice we said *good*. This is a big word, and in it lies the secret of your success — and ours. Again we say — “Better be safe than sorry.” Better place your confidence in the product of a company that has served without failing, than to gamble with one whose standing you do not know. Buy a good tractor and be safe.

In 1842 J. I. Case started to build *good* threshing machines. In that year he became a leader. He advocated the development of the farm. He worked conscientiously to build a machine that would accomplish the necessary work in less time. By faithful and diligent work he succeeded. He did more than that. He established a code of business honor that has made the Case name famous. This code is typified in the Case standard of construction. This means honest construction. It means putting into your machines the best material and the best workmanship that their use requires. Contrast this policy and its safety to you with those of the many small tractor companies that are springing up like mushrooms. Hundreds of other tractors have been sold to farmers. Hundreds of farmers have or will have “orphan machinery” on their farms. They might just as easily have been safe, not sorry, if they had only stopped to consider.







## Steam Engines

CASE always has been and in many localities always will be the most satisfactory power. This company always has believed and still believes in the steam engine. Time has proved that our position is correct. It has also proved that the Case Steam Engine is ideal for which others are striving.

There are hundreds, yes thousands, of farmers in the United States, Canada, South America, and Europe, who are successfully using Case Steam Tractors. Today these users are excellent salesmen for us. So satisfactorily have our Tractors met the need of the farmers that the good word has been passed from farm to farm, from generation to generation, and today because of the work which they do, Case Steam Engines are, the world over, acknowledged as a standard by which others are judged.

The popularity of these tractors is the result of years of experience. For decades, in our experimental labora-

tories, in our shops, in the fields of the North and the South, East and West, we have striven to improve our product. We have always led, but still have never been satisfied. Each year has found at least slight changes, which marked our progress to the present state. We do not expect to rest here. Steadily we shall work to make better that which now is best. How, we do not know, but you can be sure that if any advance is possible you will find it first in the Case Engine.

The steam engines described on the following pages are built to give years of faithful service. The thousands of prosperous users of these engines are the best testimony that we can possibly offer to the results which these engines produce. For all kinds of steam power we maintain that there is none that can equal, for simplicity, economy, ease of operation, and all-around efficiency, these Case Steam Engines.



Prices quoted on pages 91 and 92





## 30-Horsepower Steam Tractor

*7 $\frac{1}{4}$  x 10-Inch Cylinder, Simple*

**H**ERE'S a tractor for the farmer with the smaller acreage. The price of horses has gone up, the cost of feed has gone up, and the same applies to help. Farm with a power, even on the small farms.

If your farm justifies the use of three or four plows, it is the tractor you need. It is just the thing for doing the threshing machine, operating the baling press,

corn sheller, husker shredder, rock crusher, and all other machinery requiring power.

We've combined in this small tractor the same careful workmanship, the same excellent materials, that have made famous all Case products.

Price complete, as shown below, \$1390.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

### *Specifications*

BOILER BARREL — 26 inches in diameter.

FIRE-BOX — Length, 30 inches; width, 23 $\frac{1}{4}$  inches; height, 30 $\frac{1}{2}$  inches above grates. Stay Bolts,  $\frac{7}{8}$ -inch diameter.

THROUGH-STAYS — Four steel through-stays, 1-inch diameter, with upset ends, support front and rear heads; rear head has in addition two 1-inch diameter diagonal braces.

TUBES — 36 in number, 1 $\frac{3}{4}$ -inch diameter, 67 inches long.

HEATING SURFACE of boiler, 119.4 square feet (above grates).

GRATE AREA — 4.81 square feet.

STEAM PRESSURE — 150 pounds per square inch.

FLYWHEEL — 36-inch diameter; face, 9 $\frac{1}{2}$  inches; speed 250 revolutions per minute.

FRONT WHEELS — Height, 42 inches; tires, 8 inches wide.

TRACTION WHEELS — Height, 5 feet; tires, 14 inches wide regular; 8-inch extension rims at extra price.

TRACTION SPEED — 2.4 miles per hour.

EXTREME WIDTH of engine with 14-inch tires is 6 feet 1 $\frac{1}{2}$  inches.

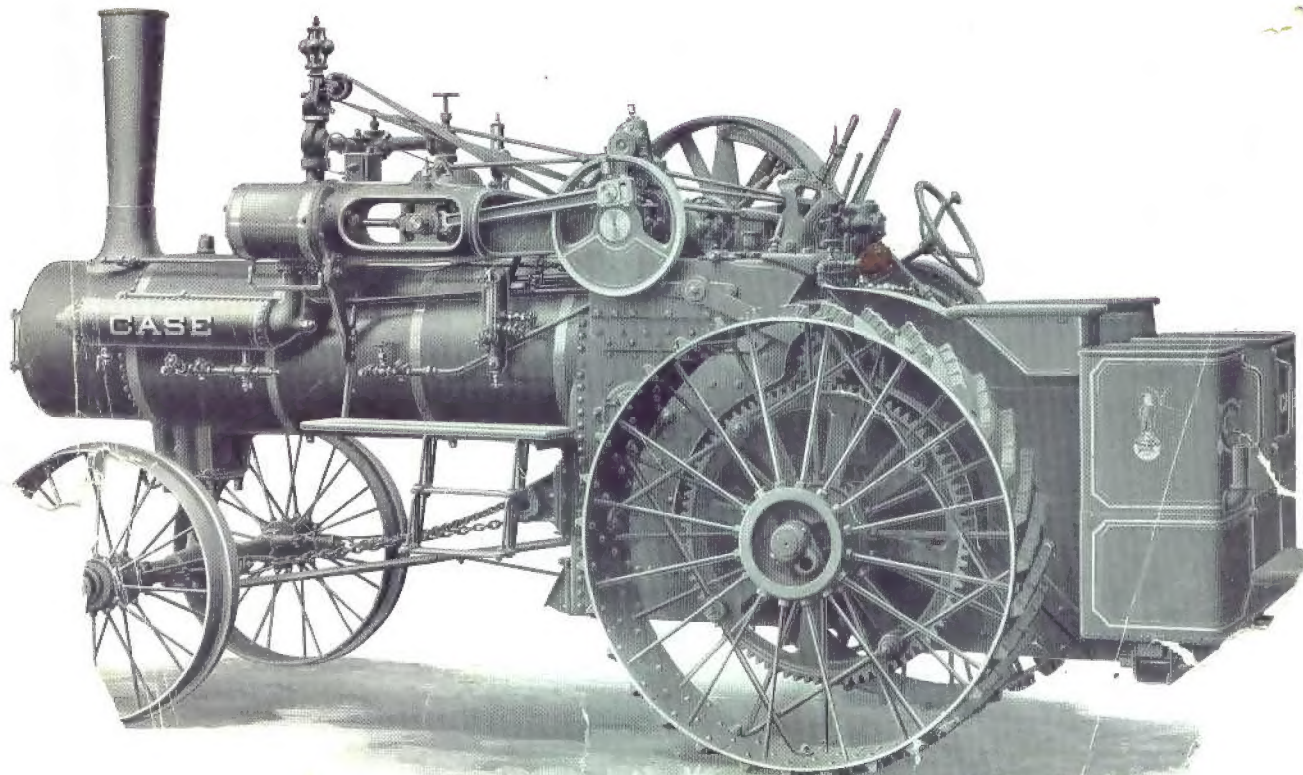
HEIGHT to top of stack, 9 feet 3 inches.

DISTANCE between axles, 8 feet 1 $\frac{7}{8}$  inches.

ATTACHMENTS on special order at extra price: Jacketed boiler, canopy, headlight, contractor's fuel bunkers, extension rims.

All CASE Steam Engines will develop at least ten percent more B. H. P. than rated.

*Prices quoted on pages 91 and 92*





# 40-Horsepower Steam Tractor

## 8¼ x 10-Inch Cylinder, Simple

NO greater satisfaction can come to the farmer than to know that he has on his farm a tractor bearing the name CASE. Farmers for decades have placed faith in this name, and never found it wanting.

The history of the good farm product—one on which the farmer can rely, has been so closely interwoven with the word CASE that today Case products are the farmer's guaranty of *real* satisfaction. Of course, there are tractors cheaper than Case. But have they the materials in them

that mean long life? Are they dependable and economical in operation? Case quality means to buyers the best work in the shortest time at the least cost. It is the farmer's safest investment.

This 40 shows the same evidence of mechanical skill that is so typical of all Case products. The farmer can demand no more.

Price complete, as shown below, \$1550.00, F. O. B. Racine, Wisconsin. Ten percent discount for cash.

### Specifications

BOILER BARREL — 28 inches in diameter.

FIRE-BOX — Length, 34¾ inches; width, 25¼ inches; height, 30 inches above grates. Stay Bolts, 1½-inch diameter.

THROUGH-STAYS — Four steel through-stays, 1-inch diameter, with upset ends, support front and rear heads; rear head has in addition two 1½-inch diagonal braces.

TUBES — 32 in number, 2-inch diameter, 84½ inches long.

HEATING SURFACE of boiler, 144.1 square feet (above grates).

GRATE AREA — 6.08 square feet.

STEAM PRESSURE — 150 pounds per square inch.

FLYWHEEL — 40-inch diameter; face, 10½ inches; speed 250 revolutions per minute.

FRONT WHEELS — Height, 44 inches; tires, 10 inches wide regular.

TRACTION WHEELS — Height, 5 feet 6 inches; tires, 18 inches wide; ¾- or 12-inch extension rims at extra price.

SPEED — 2.35 miles per hour.

WIDTH of engine with 18-inch tires is 7 feet 4¾ inches.

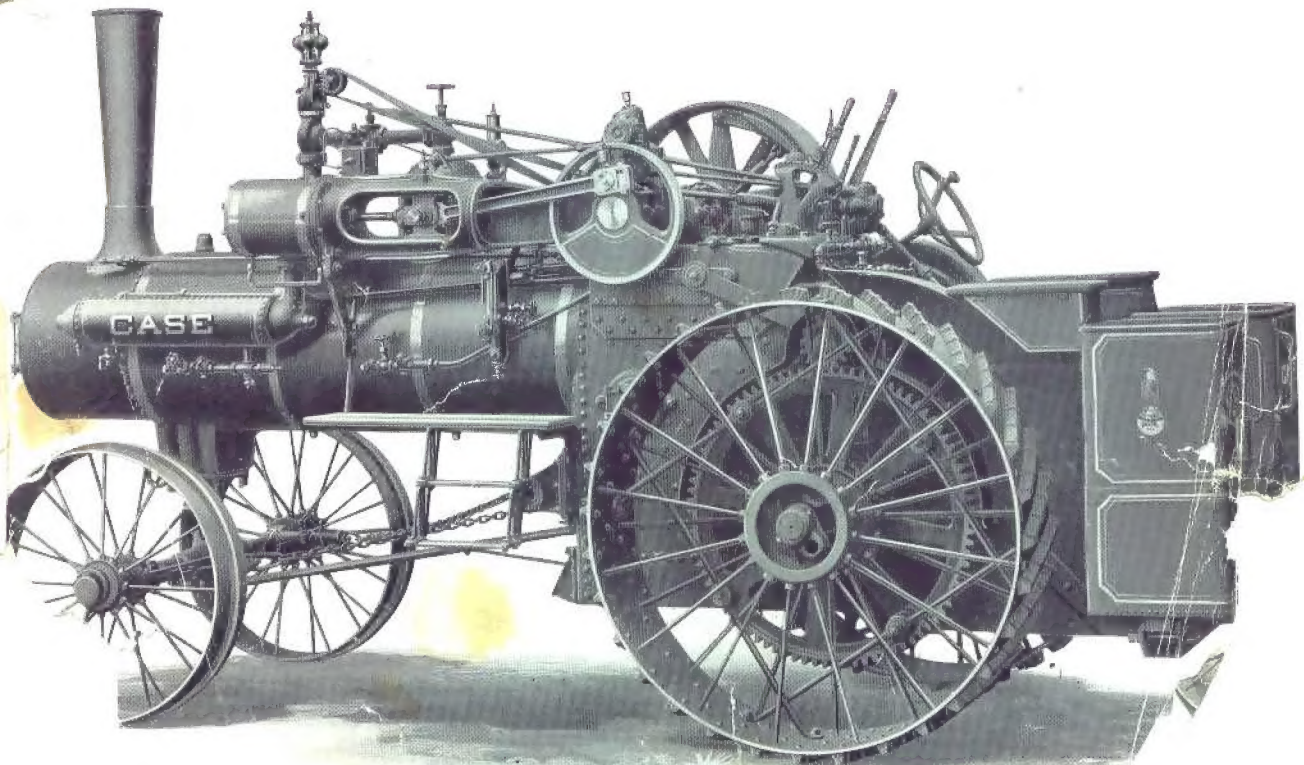
HEIGHT to top of stack, 9 feet 10¼ inches.

DISTANCE between axles, 10 feet 1 inch.

ATTACHMENTS furnished on special order at extra price: Contractor's fuel bunkers, rocking grates, jacketed boiler if coal burner, canopy, headlight, extension rims, compounded cylinders and straw burner.

All CASE Steam Engines will develop at least ten percent more B. H. P. than rated. This Tractor at Winnipeg in 1913, developed 63.35 B. H. P. at 267.5 revolutions per minute (normal, 250 revolutions per minute) and at normal pressure.

*Prices quoted on pages 91 and 92*





# 50-Horsepower Steam Tractor

## 9 x 10-Inch Cylinder, Simple

CASE standard means putting into all our machines only those materials that laboratory and field tests have proven will stand the long usage. It means that the designers have embodied their best efforts in making the products worthy of the name they bear. Then, too, the finest workmanship has been combined to make a finished product that will continue to make satisfied customers. So, in this 50-horsepower tractor we have exercised the

same minute attention to every detail, with the same result: It's a leader in its class — the farmer's insurance of satisfaction, of better work, and bigger profits. It is an all-around engine that has proven its worth as a result-producer. That is what counts — proofs *not* promises.

Price complete, as shown below \$1755.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

### Specifications

BOILER BARREL — 29 inches in diameter.

FIRE-BOX — Length,  $39\frac{1}{2}$  inches; width,  $25\frac{1}{4}$  inches; height, 30 inches above grates. Stay Bolts,  $\frac{1}{8}$ -inch diameter.

THROUGH-STAYS — Four steel through-stays, 1-inch diameter, with up-set ends, support front and rear heads. The rear head has in addition two  $1\frac{1}{8}$ -inch diagonal braces.

TUBES — 38 in number, 2-inch diameter,  $90\frac{1}{2}$  inches long.

HEATING SURFACE of boiler — 178.8 square feet (above grates).

GRATE AREA — 6.9 square feet.

STEAM PRESSURE — 150 pounds per square inch.

FLYWHEEL — 40-inch diameter; face, 12 inches; speed 250 revolutions per minute.

FRONT WHEELS — Height, 44 inches; tires, 10 inches wide regular.

TRACTION WHEELS — Height, 5 feet 6 inches; tires, 20 inches wide. 8- or 12-inch extension rims at extra price.

SPEED — 2.3 miles per hour.

EXTREME WIDTH of engine with 20-inch tires is 7 feet  $5\frac{5}{8}$  inches.

HEIGHT to top of stack, 10 feet.

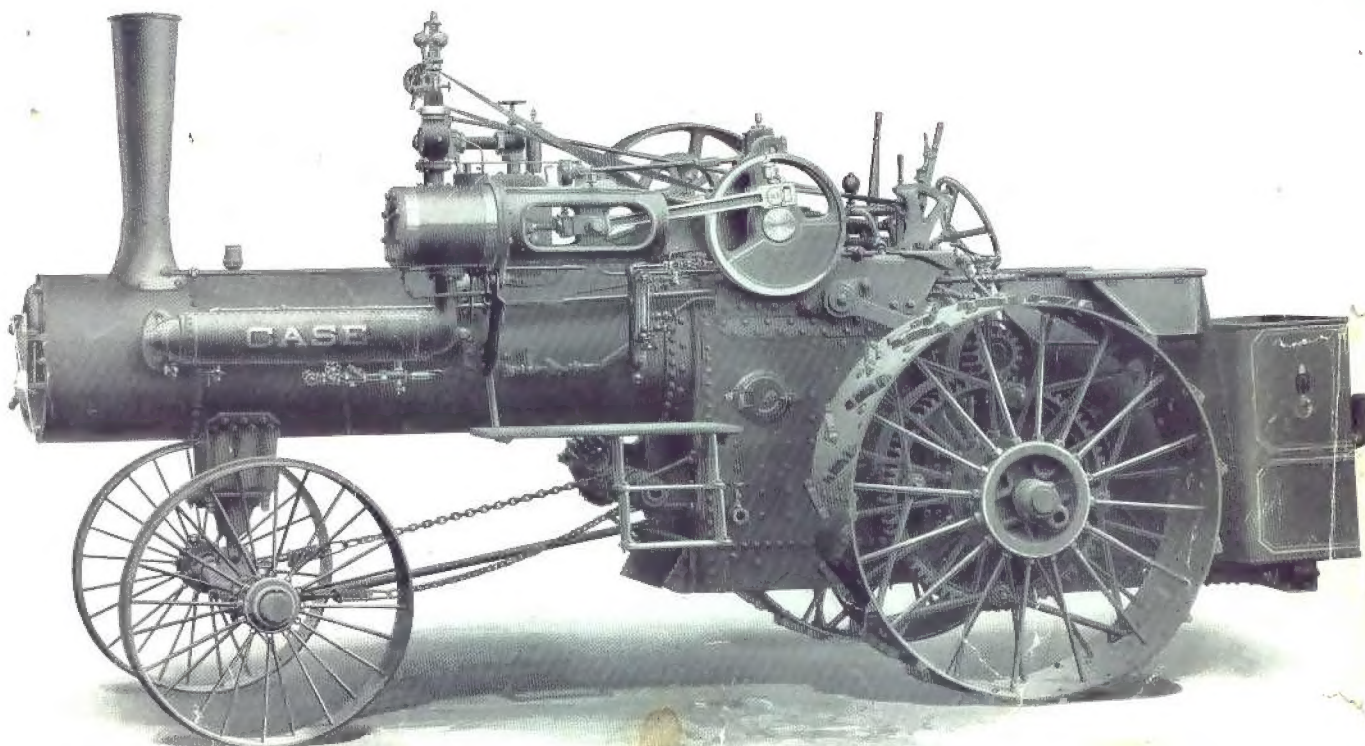
DISTANCE between axles, 11 feet.

SPECIAL ATTACHMENTS furnished on special order at extra price:

Jacketed boiler if coal burner, contractor's fuel bunkers, rocking grates, canopy, headlight, extension rims, compounded cylinders, straw burner.

All CASE Steam Engines will develop at least ten percent more B. H. P. than rated.

*Prices quoted on pages 91 and 92*







## 65-Horsepower Steam Tractor

### 10 x 11-Inch Cylinder, Simple

THE purchase of a tractor is an investment in your business of farming. Your dividends will be in proportion to the wisdom you exercise in choosing it. Buy the cheap, inefficient tractor and your profits are eaten up in repairs. Then, too, this type of tractor will fail to stand up. It's doomed for a short life. You can't get away from it. The stuff isn't in it. You can never get something for nothing.

This 65-Horsepower Steam Tractor has *not* been built

to sell on price. It *has* been built to give good service, produce better results at less cost. It is a tractor that will maintain this efficiency over a period of many years.

This general-purpose tractor is finding its way to the wise farmer. The testimony of its users from all parts of the world bears witness to its efficiency. It has made good.

Price complete, as shown below, \$2190.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

### Specifications

BOILER BARREL — 32¼ inches in diameter.

FIRE-BOX — Length, 43¾ inches; width, 29 inches; height, 31 inches above grates. Stay Bolts, ¾-inch diameter.

THROUGH-STAYS — Four 1½-inch steel through-stays, with upset ends support the front and rear heads. Rear head has in addition two 1¼-inch diagonal braces.

TUBES — 47 in number, 2-inch diameter, 96½ inches long.

HEATING SURFACE of boiler, 229.4 square feet (above grates).

GRATE AREA — 8.81 square feet.

ROCKING GRATES — Regularly furnished with this engine.

STEAM PRESSURE — 150 pounds per square inch.

FLYWHEEL — 40-inch diameter; face, 12¼ inches, speed 250 revolutions per minute.

FRONT WHEELS — Height, 48 inches; tires, 12 inches wide regular. On special order 18-inch at extra price.

TRACTION WHEELS — Height, 6 feet; tires, 22 inches wide; 8- and 12-inch extension rims at extra price.

TRACTION SPEED — 2.4 miles per hour at normal speed of engine.

EXTREME WIDTH of engine with 20-inch tires is 8 feet 3¼ inches.

HEIGHT to top of stack, 10 feet 1¼ inches.

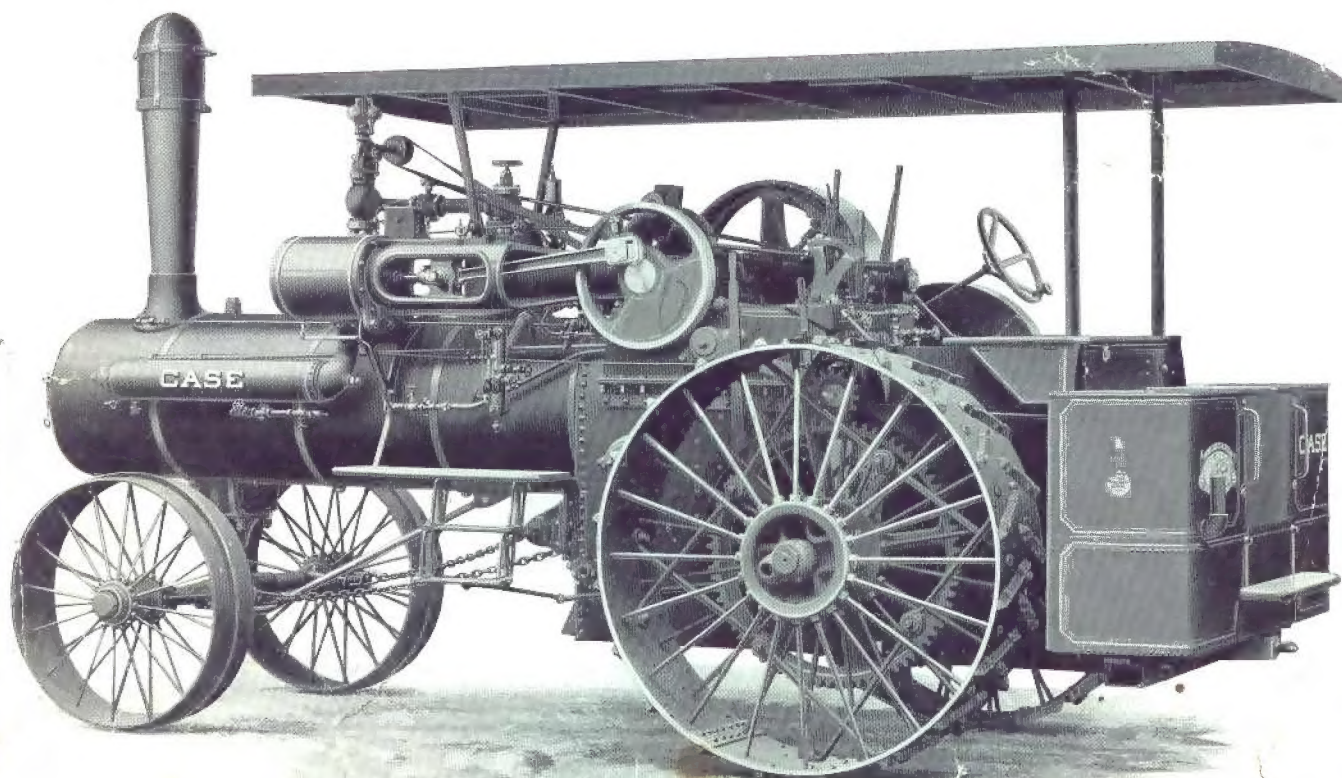
DISTANCE between axles, 11 feet 10 inches.

SPECIAL ATTACHMENTS furnished on special order at extra price:

Jacketed boiler if coal burner, contractor's fuel bunkers, canopy, headlight, extension rims, straw burner.

All CASE Steam Traction Engines will develop at least ten percent more B. H. P. than rated.

*Prices quoted on pages 91 and 92*







# 75-Horsepower Steam Tractor

## 11 x 11-Inch Cylinder, Simple

THE 75-horsepower steam tractor for years has been a favorite with hundreds of power users. In fact every size Case steam engine has its followers. Every Case steam engine is built with such exactness and care as to make one just as worthy as the other. In quality, in performance and long-lasting qualities, they must all be alike. Case has but one standard of construction, and that is to

build right. This we know, in our long experience, pays. We shall always adhere to it. These are the qualities that are characteristic of this 75. These are the factors that make Case engines the most economical in the long run.

Price complete, as shown below, \$2250.00 F. O. B. Racine, Wisconsin.

### Specifications

BOILER BARREL — 34 inches in diameter.

FIRE-BOX — Length, 44 inches; width,  $30\frac{3}{4}$  inches; height  $30\frac{3}{4}$  inches above grates. Stay Bolts,  $\frac{7}{8}$ -inch diameter.

THROUGH-STAYS — Five 1-inch steel through-stays, with upset ends support the front and rear heads. Rear head has in addition two  $1\frac{1}{4}$ -inch diagonal braces.

TUBES — 58 in number, 2-inch diameter,  $96\frac{1}{2}$  inches long.

HEATING SURFACE of boiler, 282.6 square feet (above grates).

GRATE AREA — 9.4 square feet.

STEAM PRESSURE — 140 pounds per square inch.

BOILER — Constructed in accordance with the laws of the Canadian provinces.

FLYWHEEL — 40-inch diameter; face, 12 inches; speed, 250 revolutions per minute.

FRONT WHEELS — Height, 44 inches; tires, 12 inches wide regular.

On special order 16-inch at extra price.

TRACTION WHEELS — Height, 5 feet 6 inches; tires, 24 inches wide; 8- or 12-inch extension rims at extra price.

TRACTION SPEED — 2.5 miles per hour.

EXTREME WIDTH of engine with 24-inch tires is 9 feet  $4\frac{1}{4}$  inches.

HEIGHT, to top of stack, 10 feet  $2\frac{1}{2}$  inches.

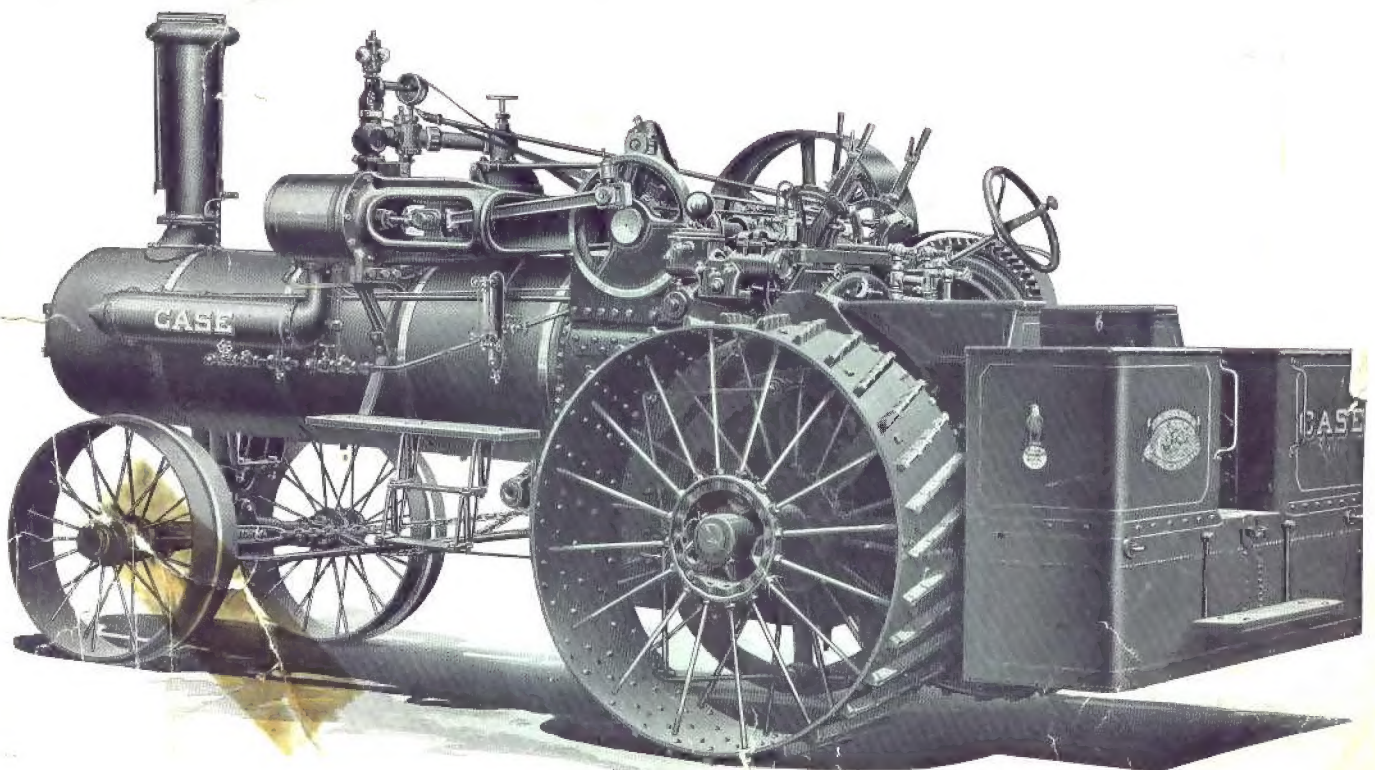
DISTANCE between axles, 11 feet  $10\frac{1}{4}$  inches.

WEIGHT, with the boiler empty, and contractor's fuel bunkers, 20,440 pounds.

SPECIAL ATTACHMENTS furnished on special order at extra price; Jacketed boiler if coal burner, contractor's fuel bunkers, rocking grates, canopy, headlight, extension rims, compounded cylinders, straw burner.

All CASE Engines will develop at least ten percent more indicated horsepower than their actual guaranteed brake horsepower rating.

*Prices quoted on pages 91 and 92*





# 80-Horsepower Steam Tractor

## 11 x 11-Inch Cylinder, Simple

**H**ERE, again, in this 80-Horsepower Tractor is an evidence of what Case design and construction means to the farmer. Farmers who have witnessed this tractor's performance will add testimony to its already long record of achievements.

In the field this machine is withstanding the most exacting tests. And in the test for economy this tractor is without an equal, excepting our 110, of course. Farmers still remember its wonderful performances at the Winnipeg

Contest. For three consecutive years this tractor was proven the most efficient. For just as many seasons it was awarded the Gold Medal for low fuel consumption. Again we had triumphed as a result of adhering to the principles of careful design and honest construction. If your farm requires a tractor of this size, there can be no better choice than this 80.

Price complete, as shown below, \$2350.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

### Specifications

BOILER BARREL — 34 inches in diameter.

FIRE-BOX — Length, 44 inches; width, 30 $\frac{3}{4}$  inches; height, 31 inches above grates. Stay Bolts,  $\frac{7}{8}$ -inch diameter.

THROUGH-STAYS — Five 1-inch steel through-stays, with upset ends support the front and rear heads. Rear head has in addition two 1 $\frac{1}{4}$ -inch diagonal braces.

TUBES — 58 in number, 2-inch diameter, 96 $\frac{1}{2}$  inches long.

HEATING SURFACE of boiler, 282.6 square feet (above grates).

GRATE AREA — 9.4 square feet.

ROCKING GRATES are furnished regularly with this engine.

STEAM PRESSURE — 150 pounds per square inch.

FLYWHEEL — 4-foot diameter; face, 12 $\frac{3}{4}$  inches; speed 250 revolutions per minute.

FRONT WHEELS — Height, 48 inches; tires, 14 inches wide regular. On special order 18-inch at extra price.

PUMP — CASE Double-Acting geared pump furnished regularly.

TRACTION WHEELS — Height, 6 feet 2 inches; tires, 24 inches wide, 8- and 12-inch extension rims at extra price.

TRACTION SPEED — 2.39 miles per hour at normal speed of engine.

EXTREME WIDTH of engine with 24-inch tires is 8 feet 9 inches.

LENGTH over all with contractor's fuel bunkers 21 feet 4 inches.

HEIGHT to top of stack, 10 feet 2 $\frac{1}{4}$  inches.

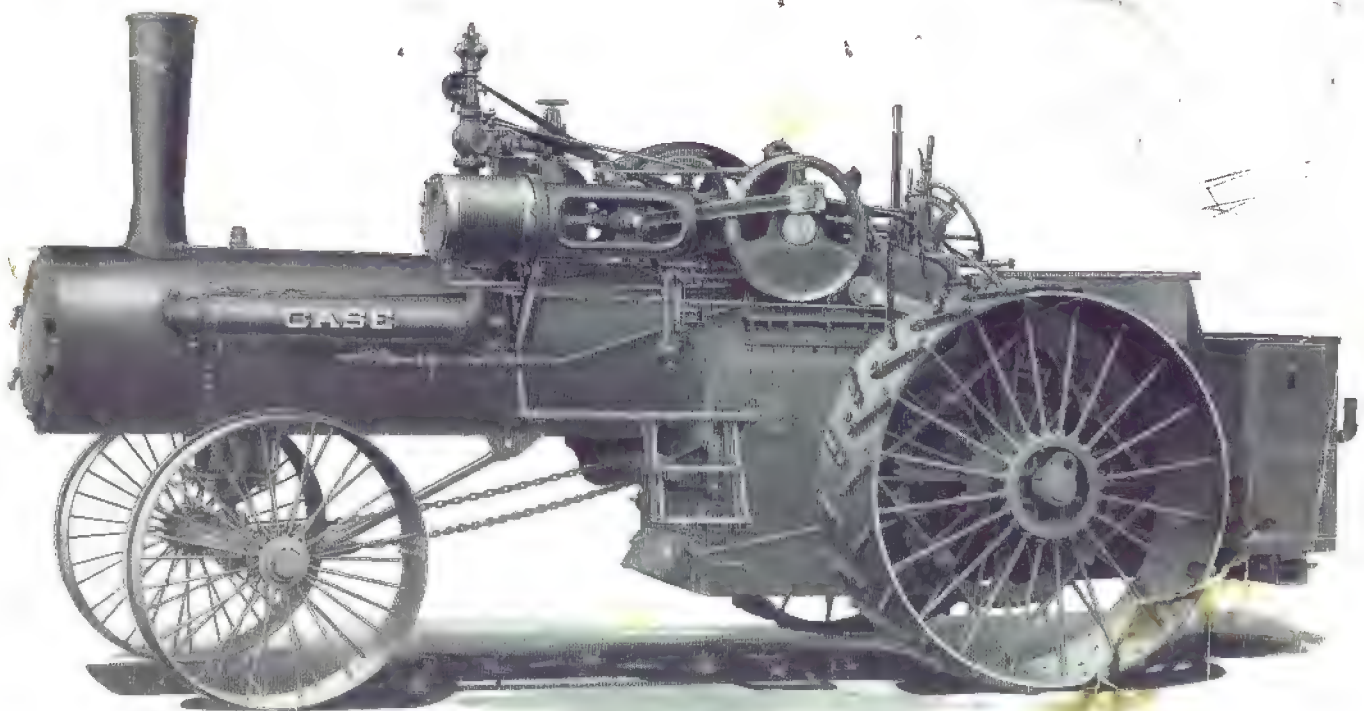
DISTANCE between axles, 11 feet 10 $\frac{1}{4}$  inches.

CONTRACTOR'S FUEL BUNKERS — Capacity, 1,100 pounds coal (bituminous) and 252 gallons in tank. Water in boiler at working level, 2,180 pounds.

SPECIAL ATTACHMENTS furnished on special order at extra price: Jacketed boiler if coal burner, canopy, headlight, extension rims, compounded cylinders, straw burner.

All CASE Steam Engines will develop at least ten percent more B. H. P. than rated. This Tractor at Winnipeg in 1913, developed 109.9 B. H. P. at normal speed and at normal pressure.

*Prices quoted on pages 91 and 92*





# 110-Horsepower Steam Tractor

## 2 x 12-Inch Cylinder, Simple

**T**HIS is the largest Case Steam Tractor built. Every improvement gained in our long experience in building steam tractors is embodied in this tractor. It is a marvel in power!

One of the owners of this tractor says: "My Case 110-Horsepower engine has plowed over 7,000 acres of land and it has cost but a trifle to keep it up. It is one of the easiest steamers. It burns less coal than any other engine I have ever had and I have had thirty years' experience

with steam engines." Another owner writes: "The Case 110 I bought in 1912 certainly runs fine. I have been pulling twelve 14-inch plows and sometimes four discs behind. It handles them all right. It runs just the same as when I bought it from you people three years ago."

Everywhere this tractor is acknowledged the leader. Price complete, as shown below, \$2400.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

### Specifications

**BOILER BARREL** — 38 inches in diameter.  
**FIRE-BOX** — Length, 49¼ inches; width, 35¼ inches; height, 36 inches above grates. Stay Bolts, 1-inch diameter.  
**THROUGH-STAYS** — Six steel through-stays, 1½-inch diameter, support the front and rear heads. Rear head has in addition four 1½-inch diagonal braces.  
**TUBES** — 76 in number, 2-inch diameter, 8 feet 4½ inches long.  
**HEATING SURFACE** of boiler, 385 square feet (above grates).  
**GRATE AREA** — 12.06 square feet.  
**ROCKING GRATES** are furnished regularly with this engine.  
**STEAM PRESSURE** — 160 pounds per square inch.  
**FLYWHEEL** — Diameter, 43¾ inches; face, 16 inches; 230 revolutions per minute.

**FRONT WHEELS** — Height, 53 inches; tires, 16 inches wide regular or 20-inch special at extra price.

**TRACTION WHEELS** — Height, 7 feet; 36-inch tires. 12-inch extension rims will be furnished at extra price.

**TRACTION SPEED** — 2.37 miles per hour.

**EXTREME WIDTH** of engine with 36-inch tires is 10 feet 9¼ inches; length, 22 feet 8½ inches.

**HEIGHT** to top of stack, 10 feet 11½ inches.

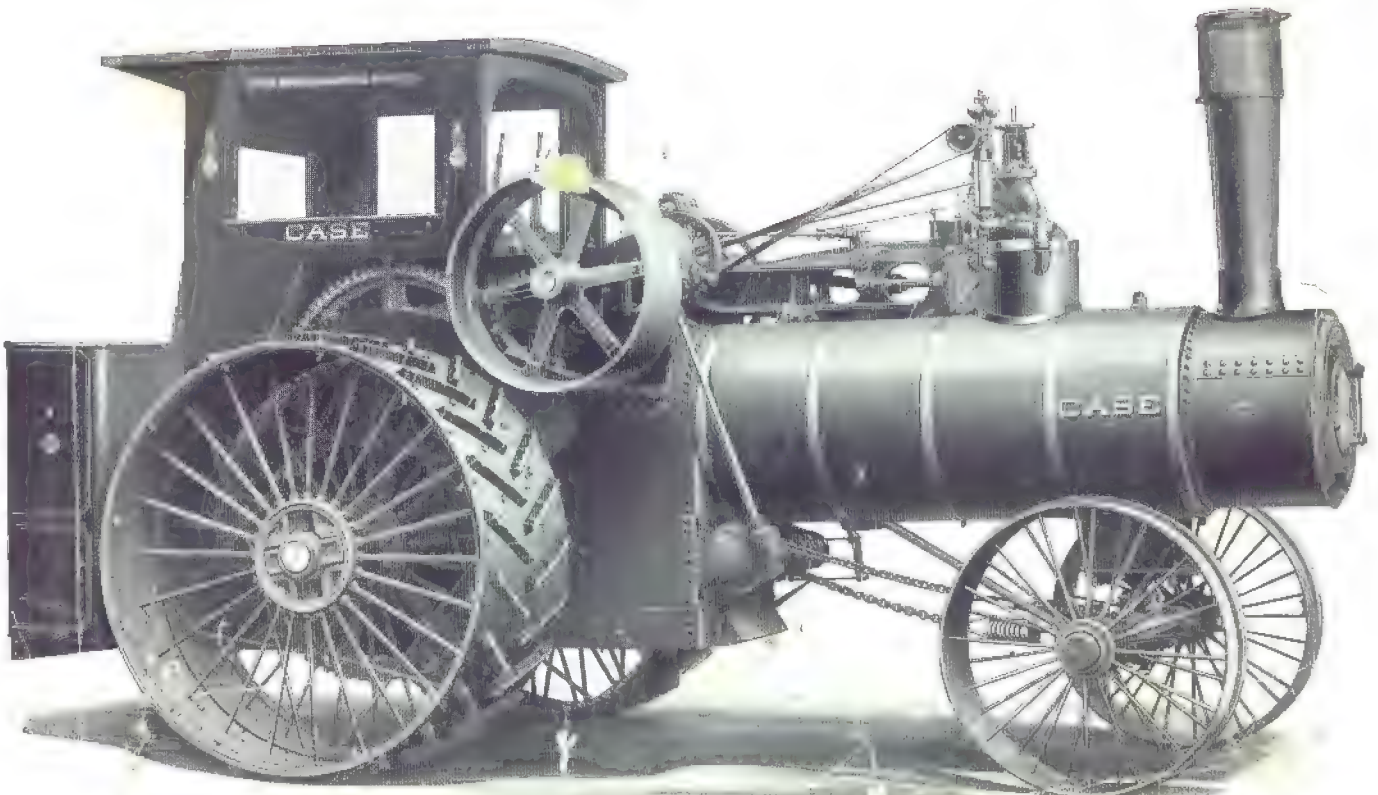
**DISTANCE** between axles, 12 feet 2¾ inches.

Built regularly with simple cylinder engine and contractor's fuel bunkers, rocking grates and jacketed boiler.

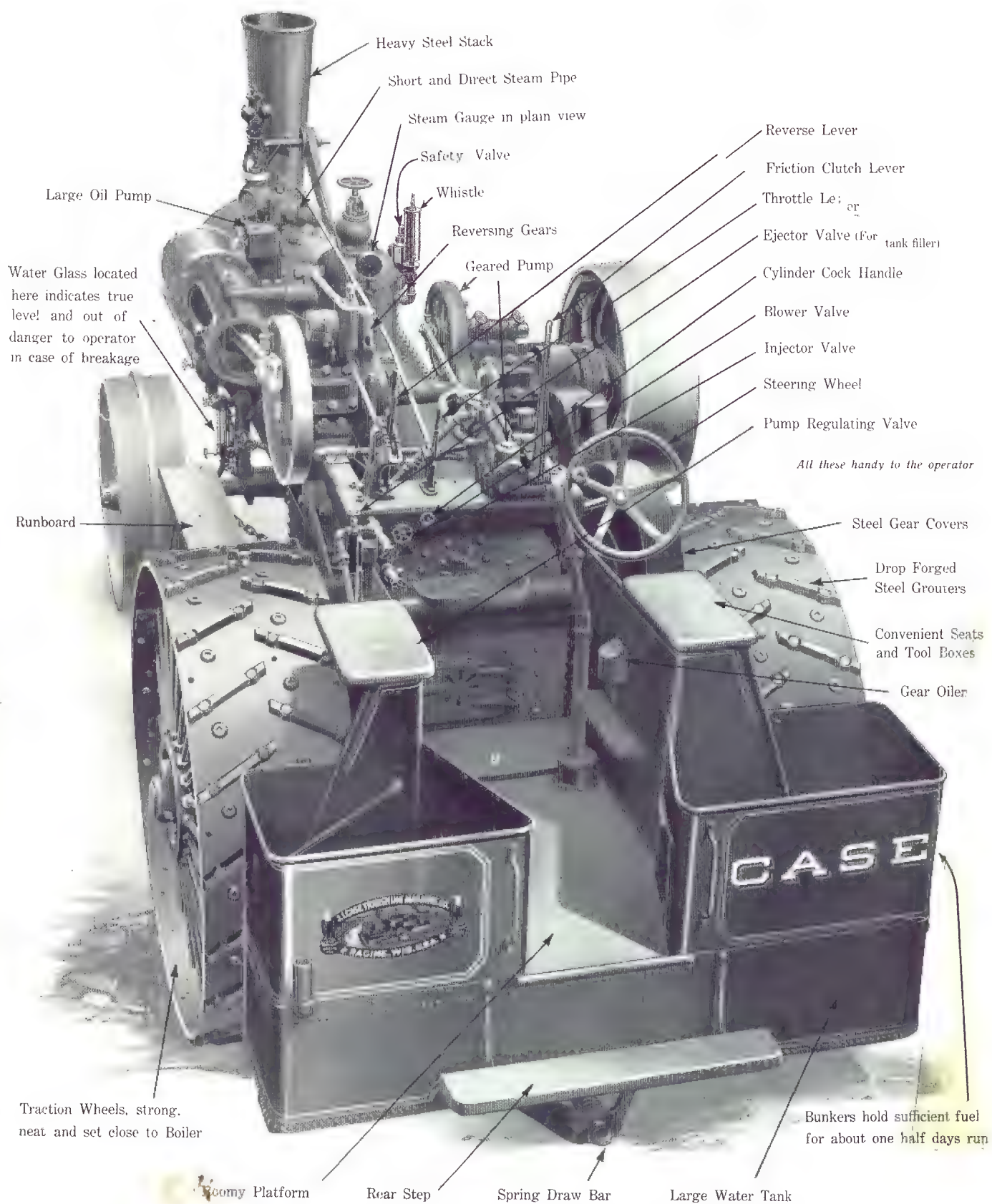
**SPECIAL ATTACH** — Locomotive cab, extension rims, straw burner.

All CASE Steam Engines will develop at least ten percent more B. H. P. than rated. This Tractor in the last Winnipeg contest developed 144.22 B. H. P. at normal speed and at normal pressure.

*Comparative Dimensions given on page 93*



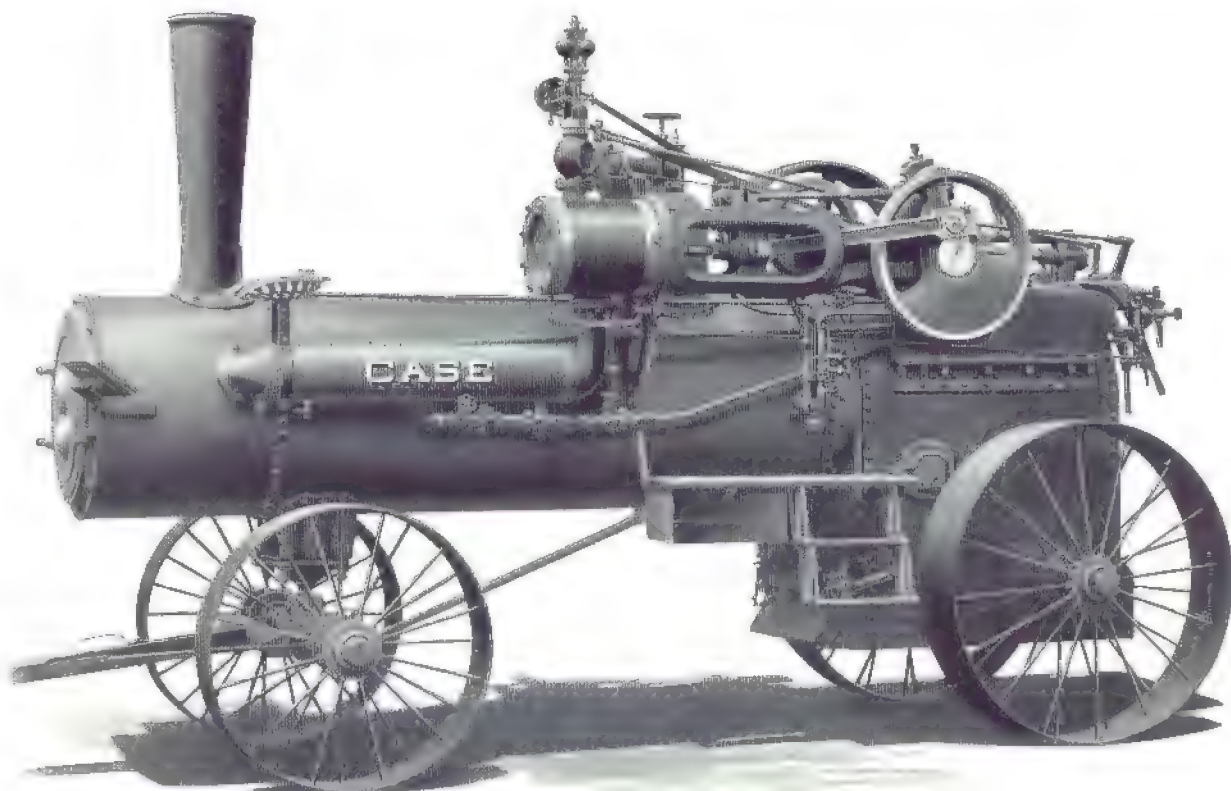




A Typical Case Steam Traction Engine

Prices quoted on pages 91 and 92





## Case Steam Portables

**M**ANY farmers have found the Case Steam Portable a most valuable addition to their farm equipment. It can be used for all kinds of work to which power can be applied, such as operating threshing machinery, balers, shredders, corn shellers, grinders, wood saws, etc. To the farmer who wants a machine that will give good, reliable service for such kind of work, a Case Portable will prove a splendid investment.

Case Portables are built in sizes from 18 to 80-horsepower. They are constructed along the same lines as Case Steam Tractor Engines, with the same boiler, fittings, and fixtures. Being equipped with large wheels, with long bearings in the hubs and smooth tires, they

are very light of draft. The rear end on all Case Portables is also supported by extra strong stub axles which are held by substantial brackets bolted to the side sheets of the boiler. With the exception of the 18 and 30, all sizes can be fitted with our straw-burning attachment and jacketed boiler at an extra cost of \$50.00. Brakes can be furnished at extra cost.

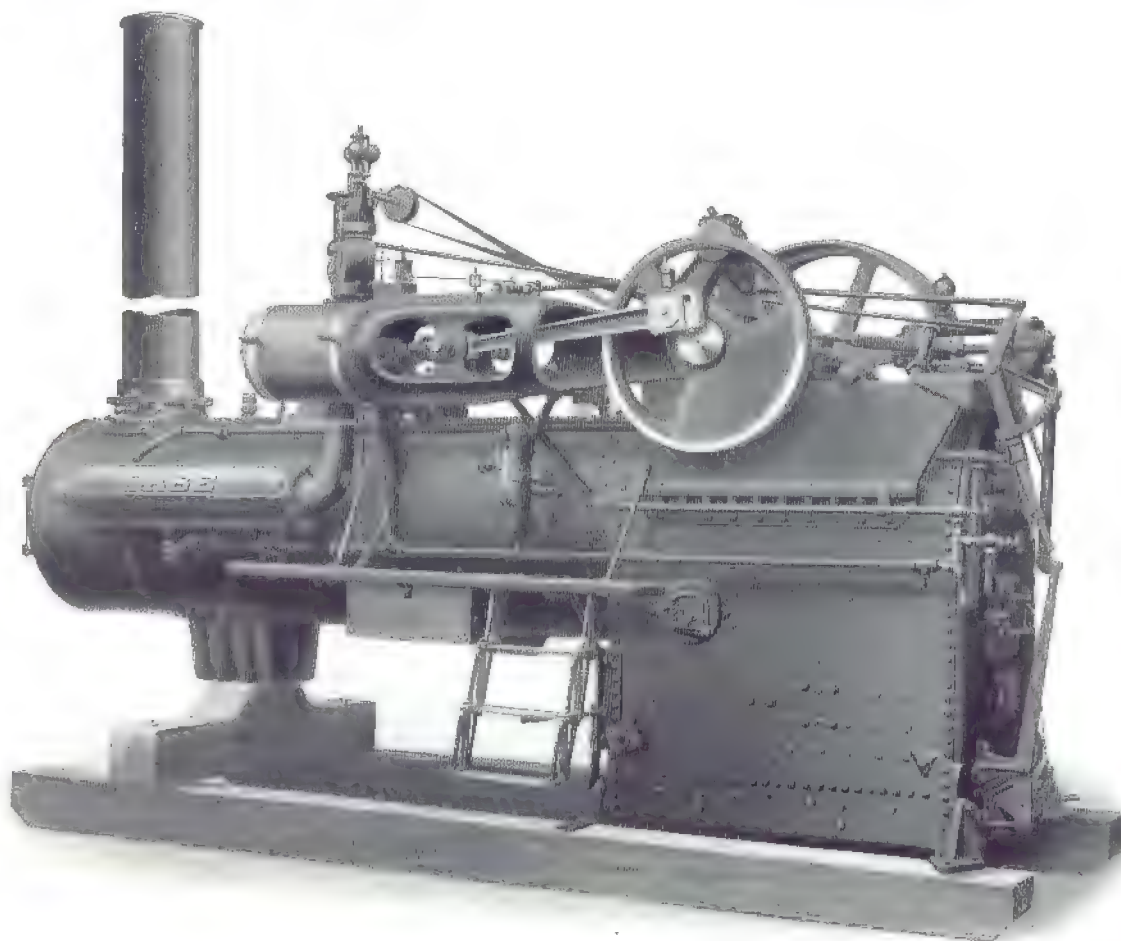
*Prices quoted on pages 91 and 92*

Comparative Dimensions of Portable Engines

Horsepower	CYLINDER		FLYWHEEL			WHEELS			
	Diameter—Inches	Stroke—Inches	Normal Speed—Revolutions per Minute	Diameter—Inches	Face—Inches	FRONT		REAR	
						Diameter—Inches	Width—Inches	Diameter—Inches	Width—Inches
18	6	8	250	36	7	30	5	36	5
30	7 $\frac{1}{4}$	10	250	36	9 $\frac{1}{2}$	38	8	44	8
40	8 $\frac{1}{4}$	10	250	40	10 $\frac{1}{2}$	42	8	53	10
50	9	10	250	40	12	42	10	53	12
65	10	11	250	40	12	42	10	53	12
80	11	11	250	40	12 $\frac{1}{4}$	42	10	53	12







## Skid Engines

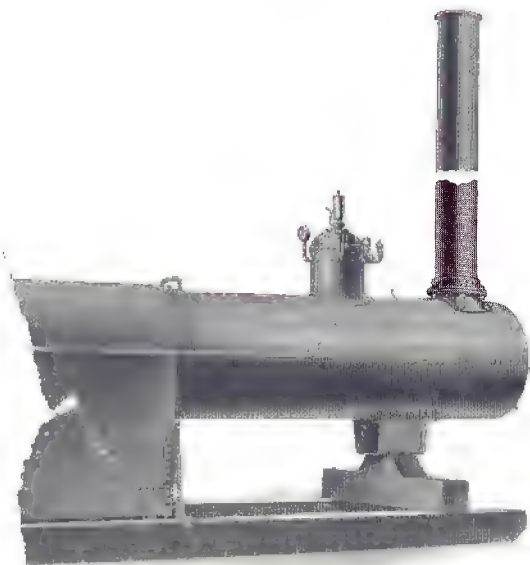
IN speaking of Case Skid Engines, one of the Case users from North Carolina had the following to say about it: "I have a Case Skid Engine that I bought for \$10 and the expense for keeping it up for five years

has been only 45 cents and it has been running almost steadily. I have always found Case machinery just as good as they stated and a whole lot better."

Owners in every section of the country are testifying to the efficiency of Case Skid Engines. They are built in the following sizes: 50-, 65-, 80-, and 110-horsepower. They are furnished with a straight smokestack twenty feet long, in two sections. Boilers in sizes of 30-, 40-, 50-, 65-, and 80-horsepower can be furnished mounted on wheels if desired. Fixtures for boilers on skids or wheels are furnished as follows: Smokestack twenty feet long, ash-pan and grates, safety valve, whistle, steam-gauge, glass water-gauge, gauge cocks, blow-off and injector complete with connections.

The rocking grates are furnished regularly only on the 110.

These skids have been built to give real service, and the buyer who appreciates what this truly means will find no better nor safer investment than a Case.



*Prices quoted on pages 91 and 92*





## Case Boilers

**D**URING recent years there has been enacted much legislation regarding the construction of boilers. For the past six years all Case Boilers have been built to conform to the boiler laws of the Canadian Provinces; so, when the legislation in the States took effect, it was easy for us to make the few changes required to conform to these new laws.

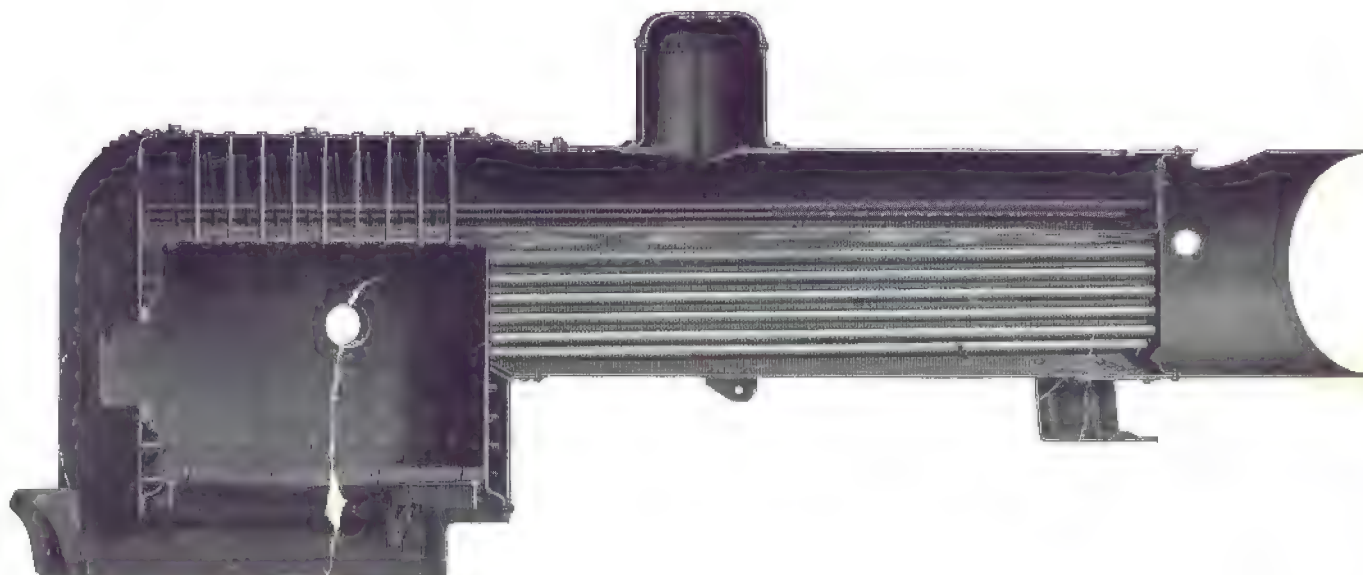
All boilers for the Case Steam Tractors are designed to meet the requirements of the most rigid laws. In them the designers have always remembered to figure extra strength to take care of the great variety of stresses and strains that are peculiar to the boiler of a traction engine as it travels through fields, ditches, and over roads that are often rough and stony.

This care in design, together with the fact that all Case Boilers are built in our own shops, by skilled workmen using the most modern machinery, dies, forms, tools, etc.,

insures the purchaser of a Case Steam Engine that has a boiler that can be operated under the laws of states.

*Inspection of Boilers* — This part of the manufacture is not to be overlooked by the purchaser. There is perhaps no single item in the production of boilers that is so valuable as that which guarantees to the user the greatest safety in the use of his machine. The Case method of inspection of boilers and boiler construction is such that a certificate of guaranty of the boilers so inspected insures the operator that they comply with the most rigid requirements of boiler construction.

It is such items as this that produce for you users of Case machinery not only excellent results in the way of profits produced, but long life of the machinery which you are using. We boast of Case Boiler Inspection.



Cross Section of Boiler





## Details of Construction

THE steel plates used in the construction of the boilers are of the best quality open-hearth flange and fire-box steel which is manufactured according to specifications approved by all boiler laws.

The chemical properties are required to be of such a high degree of purity that all injurious substances are eliminated in the manufacture. At the same time the physical properties, such as tensile strength, elongation, etc., must be kept within limits, which produces a steel that has been found, by years of experience, to be the best adapted to withstand the various strains that come upon the boiler. The materials for the tubes, rivets, stay-bolts, through stays, and braces are also made according to approved specifications which insure the right material for these parts.

The Boiler Tubes are made of cold-drawn, seamless steel, which is soft and ductile, making them easily expanded and beaded. They are arranged in rows, vertically, which insures free circulation of the water, and allows sediment to settle to the bottom where it can be washed out through the hand holes. The tubes are easily accessible for cleaning through the smoke-box door which is hinged and fastened by a clamping button. You see how the convenience of the operator is looked after in all of the small details of our construction.

*Provision for Mounting Engine without Bolts or Studs into Boiler.* The cylinder and frame are supported on a pressed steel bracket, the flange of which is securely riveted to the boiler shell. This construction rigidly supports the weight coming on it, but is flexible in the direction of the expansion and contraction of the boiler. The wing sheets, which carry the main bearings and

gearing, are supported on steel brackets which are rigidly riveted to the side sheets. Notice, also, the cross bracing from wing sheets to the steel lugs riveted to the top of the boiler. The weight of the rear of the boiler is carried on springs which rest in heavy pressed steel brackets. These brackets are riveted to the plates which form the sides of the ash pan where they are not subjected to the boiler pressure.

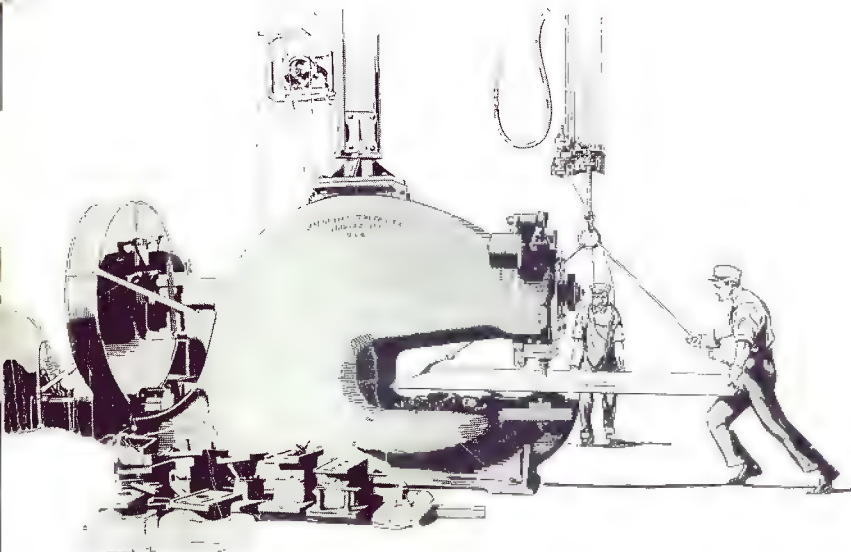
The front bolster attaches to a pressed steel bolster plate which is riveted to the reinforced boiler shell. This type of construction eliminates all leaks and the endless amount of trouble which usually results from steam bolts and studs. Does this not appeal to you, Mr. Purchaser, as a type of construction superior to any you have seen, and one that will give you years of service with minimum annoyance?

*Hand Holes and Wash-Out Plugs.* Six hand holes with steel plates and crabs, together with six wash-out holes with brass plugs, are so located as to make all parts of the boiler accessible for washing out and for future inspection.

*Reinforced Openings.* All holes where pipes enter the boiler are reinforced by an extra thickness of plate riveted to the boiler shell. This has been done on Case Boilers for several years and has resulted in the elimination of leaky joints at these points. The opening in the shell under the dome, is reinforced by a plate, equal in strength to that cut out of the shell plate to which it is substantially riveted. The upper portions of the rear head and of the front tube sheet are also reinforced by doubling plates of the same thickness as the heads and are supported or tied together by through stays which extend lengthwise through the steam space. The excess area of the rear head is supported by diagonal stays. The barrel of the boiler is also reinforced for the front bolster.

*Reamed Rivet and Stay-bolt Holes.* The holes for rivets and stay-bolts are required to be reamed out after punching. This reaming takes out all of the metal around the hole, which has been injured or disturbed by the punch, leaving the plate free from defects and thus eliminates any tendency for cracks to start from the holes.

An extensive test made by our Engineering Department, to determine the effects of punching and reaming of holes in boiler plates, showed that there was a decided advantage in favor of the reamed holes. For example, an average of ten test pieces cut from  $\frac{3}{8}$ -inch plate, 3 inches wide, with  $\frac{3}{8}$ -inch punched hole, showed less strength than an equal number of pieces cut from the same plates with holes punched small and reamed out  $\frac{1}{8}$  of an inch larger.



Holes in the Boiler such as the smokestack holes, fire-door holes, etc., are blanked by means of heavy Boiler Plate Punches. Modern equipment, such as this, means big savings in manufacturing costs. These savings go to the buyers.



than the punched size. The average strength of the latter ten pieces was six percent greater than the former, even when the metal in the test pieces had been reduced six percent by reaming the hole.

*The Longitudinal Seam on the Shell of Case Boilers* is of the *triple-riveted butt and double-strap type*. This style of joint has a much higher efficiency, and consequently greater strength than the old style lap joint which is still used on many other makes of boilers. Many of the boiler laws have forbidden the use of lap joints on the longitudinal seams of boilers, while others have penalized them by requiring a higher factor of safety to be used in figuring the working pressure. All of the laws approve the butt and double-strap type of joint as being the best construction. (See Fig. 2.) The best is none too good for Case. In the old style lap joint the center lines of the plates do not meet. (See Fig. 1-A.) When pressure is applied to the boiler shell, these lines tend to come to a true circle, causing a bending action in the plates near the rivet lines each time the pressure is applied. (See Fig. 1-B.) This continual slight bending of the plates will, in time, crystallize the metal and develop cracks beneath the surface, inside the calking edge, as shown in Fig. 1-C. These cracks greatly reduce the strength of the plate, and being hidden are difficult for even the most skilled inspectors to detect, and are the cause of many boiler explosions. With the butt and double-strap joint, all danger from this source is eliminated.

Another advantage of the butt joint is the long pitch in the outer row of rivets, through the shell plate, which leaves a greater proportion of metal to withstand the pressure within the boiler. The rivets inside the calking edge are spaced close together, which eliminates leaks along this seam.

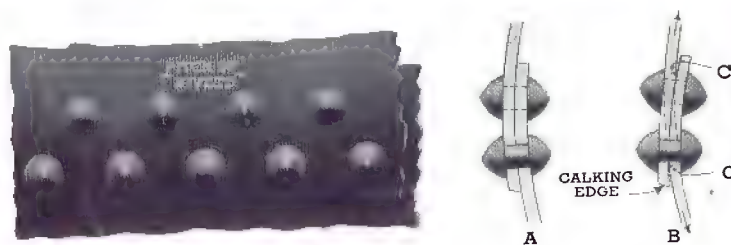
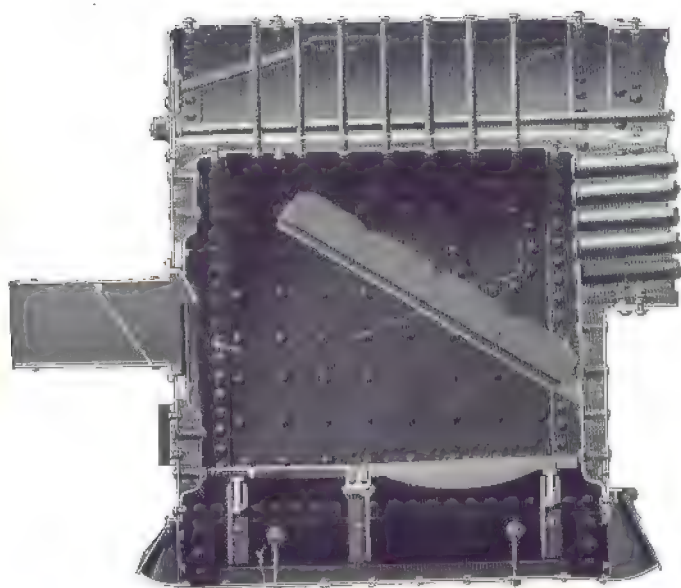


Fig. 1  
Old Style Lap Joint

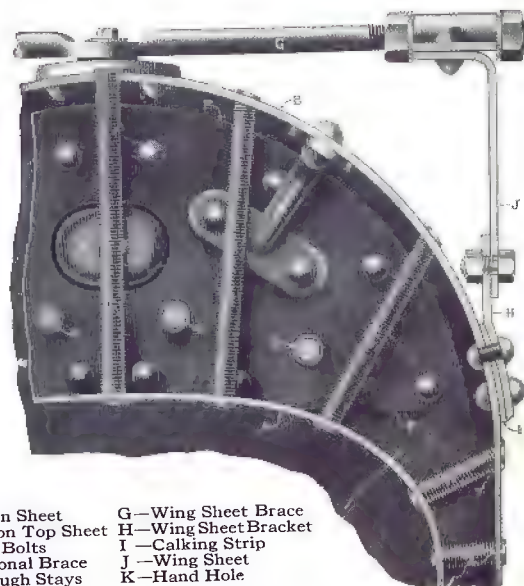


Fig. 2  
Butt and Double-Strap Joint as used in Case Boilers

*The Fire-box is large*, which insures perfect combustion of the fuel before the products of combustion enter the smoke-box. This makes firing easy and effective. The inside sheets of the boiler extend down to form the sides of the ash pan. By flanging the fire-box sheets to meet them, making one joint instead of two, we omit the objectionable mud ring.



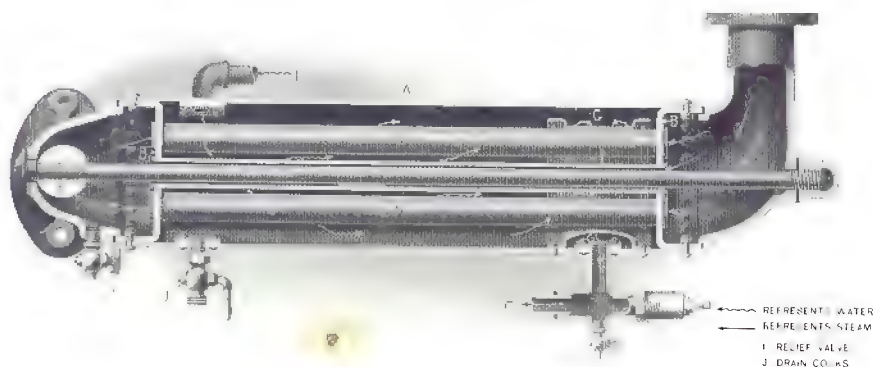
Fire-Box of Straw-Burning Boiler



- A—Crown Sheet
- B—Wagon Top Sheet
- C—Stay Bolts
- D—Diagonal Brace
- E—Through Stays
- F—Doubling Plate
- G—Wing Sheet Brace
- H—Wing Sheet Bracket
- I—Calking Strip
- J—Wing Sheet
- K—Hand Hole

Portion of Wagon Top and Crown-Sheet





SECTIONAL VIEW OF HEATER

- |   |                          |
|---|--------------------------|
| A - Heater Shell                                | F - Feed water from pump |
| B - Heater Head                                 | G - Outlet passage       |
| C - Exhaust from Cylinder                       | H - Hot water to boiler  |
| D - Tubes through which exhaust steam must pass | I - Relief Valve         |
| E - Exhaust enters smokestack                   | J - Drain Cocks          |

The *Crown Sheet* is stayed to the outer sheet the same as in locomotives. (See illustration.) The stay bolts are of double-refined iron, manufactured to approved specifications. They are spaced close enough together to withstand the high pressures carried on the boiler.

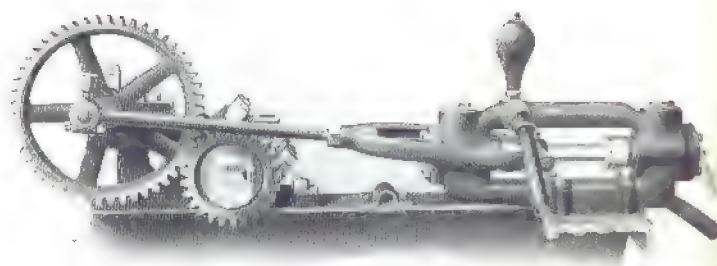
A *Factor of Safety of Five* is used in calculating the working pressure of all Case boilers; in other words, the actual strength of all parts of the boiler must be at least five times as great as the allowable working pressure. This high factor of safety gives a wide margin to take care of the various strains that come on a boiler, and insures durability through long years of service under the high steam pressures now carried on our boilers.

*Steel-Shell Feed-Water Heater.* One Case investor in Ohio, speaking of his Case Traction Engine, says, "It is an easy steamer." Another in Minnesota, and another in New York voice the same opinion; in fact, all users of Case Steam Tractors have found this to be true. There are several reasons for this factor. One important reason is the water heater, which utilizes the exhaust steam to heat the water before it goes into the boiler; thus no cold water gets into the boiler, and in consequence the steam is much more easily generated. The heater is of our own design and build. The feed water surrounds the tubes of the heater, through which the exhaust steam passes. The water thus heated is taken from the top, but discharged on the underside of the heater, passing behind an annular flange plate that leads to the outlet. The tubes are readily accessible by removing the exhaust steam inlet and outlet elbows. The sectional view shown above, with its notation, shows clearly the operation of this heater.

*The Case Geared Pump.* This pump is perhaps the greatest advance that has been known in years in steam traction engineering. It is driven by a gear on the crank shaft meshing with a larger gear that carries the crank pin which operates the pump. This pump has sufficient capacity to supply fifty percent more water than needed by the boiler in extreme conditions, a

factor of safety of great importance. The feed water on its way to the boiler passes through the steel shell heater. By means of a by-pass valve, the water can be returned to the tank when not needed in the boiler. The pump is, therefore, always ready for instant use. This geared pump is simple and sure in action, and as a boiler feeder makes a decided step in the improvement and refinement of Case steam traction engines. It is easily regulated to feed just the amount of water used by the engine, making it unnecessary constantly to turn it on and off.

We wish that it were possible for every farmer to visit our boiler shop and see just how these boilers are made. We wish you could follow the tests of materials, watch the huge machines that punch and cut the large boiler plate so accurately, and talk with the workmen whose care in handling is a source of great pride to them. Then, if



Case Geared Pump

you could stand by and see the boiler inspector make his tests, your complete confidence would immediately be gained in the Case Steam Engines.

Of course, not every farmer can take this trip, and so, for those things which you cannot see, we ask you to accept the word of a concern that for years has faithfully served the buying public.

As stated before, many laws have been enacted concerning boiler construction. The laws of many states have been unusually rigid in their demands. But we can truly say that, backed by our years of experience in building boilers, and with our organization of boiler experts, Case Boilers have always been so constructed that when new laws were enacted there was little or no difficulty in conforming to the most rigid of them.

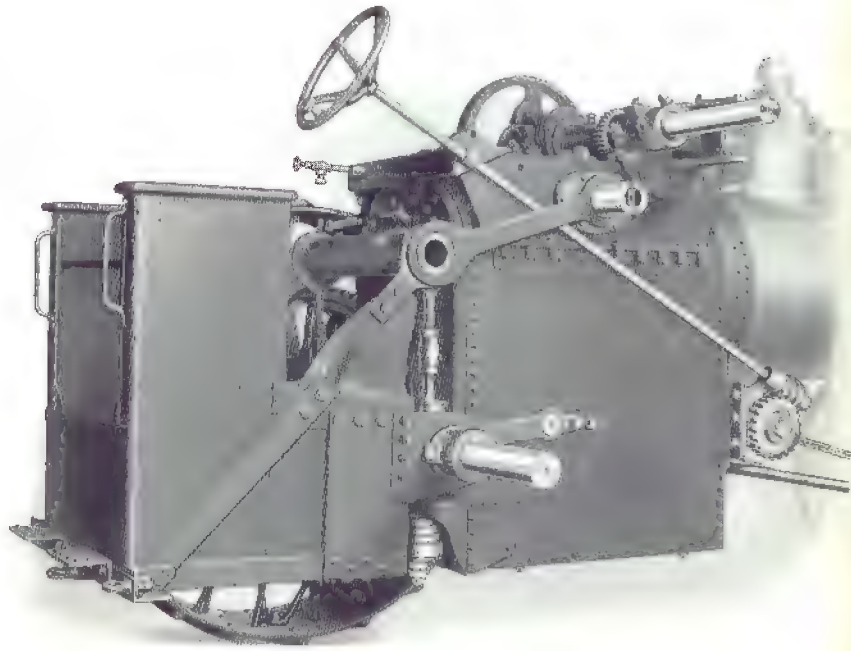
These may seem to you broad, almost contradictory, statements, but we ask you to let us prove it. Ask the thousands of owners of Case Steam Engines in all parts of the world, and they will voice the same opinion.



# The Engine

**MOUNTING and Gearing.** We have said previously that the weight of the boiler is carried on springs resting in pressed-steel brackets held to the boiler by rivets, and that by our method of mounting the engine and boiler, no important part is held to the boiler by bolts tapped into the steam or water space. The cut here illustrates how the boiler of the Case engine is suspended on springs from the rear axle cannon bearing. The traction wheels and gears of Case tractors are mounted independently of the boiler by means of radius links which connect with the counter shaft.

The distance between the counter shaft and the rear axle is maintained by distance links, provided with turn buckles which allow the gears to be kept perfectly in mesh. These links permit an up-and-down movement of the boiler without in any way disturbing the mesh of the gears, and without subjecting the gears or the boiler to shocks or strains. Side play of the upper and lower cannon bearings is prevented by means of guides. Our system of spring mounting is not only theoretically correct, but for many years has proved thoroughly efficient on engines doing all kinds of field and road work. In addition to the spring mounting of the boiler and spring differential and draw-bar, each of the guide chains has one to give elasticity while keeping the chain taut. It is these features, this doing away with the constant racking of engines under rough work that make Case engines last a "lifetime," and this is one of the reasons why they are so valuable. A traction engine is a good deal of an investment. It must last a long time in order to give its best returns. Case engine



Side View with Traction Wheel and Gearing Removed

No. 1 was made in 1876 and is now at Racine, where it can be seen by any whose curiosity leads this way. It is surely a monument to the Case Policy.

**Application of Power to Traction Wheels.** The power of the Case Steam Tractor is applied to the tires of both traction wheels. This is one reason for the fame which this engine has gained for its pulling power and ability as a hill climber. You will note in the cut this feature of Case construction, this application of power direct from the heavy rim of the bull gears to the tires of both wheels. Notice that there are eight bars leading from the rim of the bull gears direct to the outside of the wheel where the leverage is greatest.

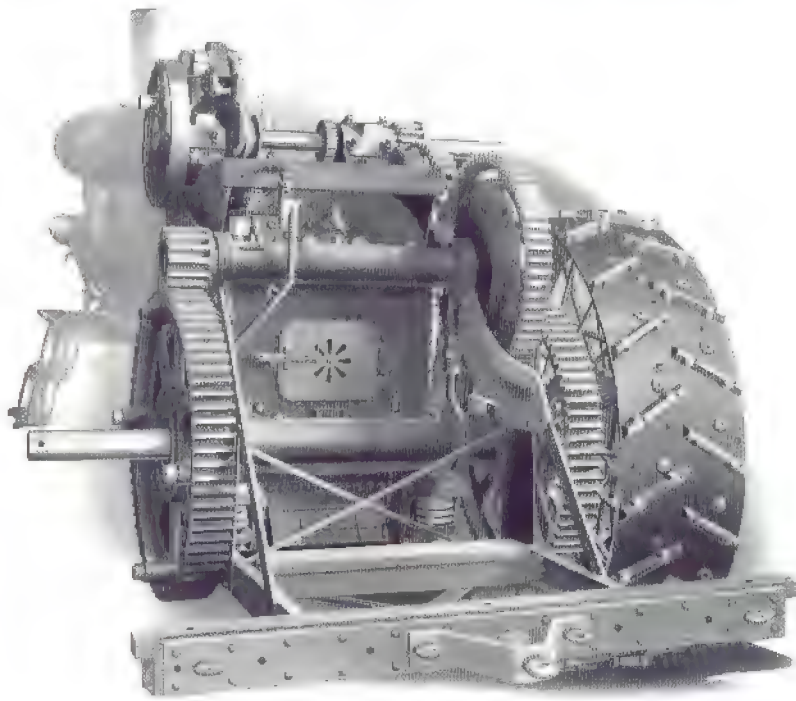
**The Traction Gears** are made from Case special ferro-steel, cast in our own gear foundry and prepared from specifications made in our own laboratories. Two pinions and two gears are used to transmit the power to the traction wheels.

**The Spring Differential Gear.** Case tractors are equipped with differential gears in which a series of coil springs receives the impact of sudden starting, which gradually transmits power to the driving gears. The differential itself is very essential in that it facilitates turning by allowing the traction wheels to accommodate themselves to the different distances traveled. It may be noted at this point that both rear wheels of Case tractors are drivers at all times, going either forward or backward, a particular advantage in plowing engines where a complete half circle must be made at the end of the furrow.



Transmission Gearing—Note Springs in Differential





View of Spring Mounting, Transmission Gearing, Frame for Contractor's Fuel Bunkers, Draw-Bars and Connections

Neither material nor workmanship was spared in the design of the front axle and bolster attachments. The axle is constructed from one solid piece of open-hearth steel, and is of sufficient strength to eliminate all possibilities of springing, bending or breakage due to any strains it may encounter in passing over rough ground or in meeting obstructions. Notice cut below.

*The Axle Clamp and Chain Clips* are made of malleable iron which will stand the strain of sudden shocks and blows such as would break grey iron castings. Attention is also called to the large diameter and the length of the hub, which is machined to a running fit on the axle, thus reducing the wearing to a minimum and making a smooth and true running wheel.

*The Hub* is provided with a sand band at each end fitting over the collar and cap so as to prevent sand or grit from entering the journal.

*The Steering Gear* is fitted to the front end of the fire-box with strong brackets which hold the chain roller in place. The chain roller is made in the form of a right hand auger, forming a guide channel for the chain to prevent it from crowding or overlapping. The steel chains are supplied with springs and by means of our method of attaching to the front axle have the same leverage in turning the front axle whether the wheels are straight or cramped to the utmost. With this arrangement chains are kept at the same tension guiding the engine with comparative ease.

## Engine Mechanism

*The Case Engine* is a single side crank of the simplest type. The frame is of the girder pattern, and the

cylinder end is faced and the guides bored at one setting, so that they are in perfect alinement with the cylinder. Before removing the frame from the boring machine the babbitted main bearing is accurately bored at right angles to the central line of guides. Every part is easy of access for oiling or adjustment. The large disc and heavy flywheel give perfect balance to the engine and permit of its being run as slowly as desired.

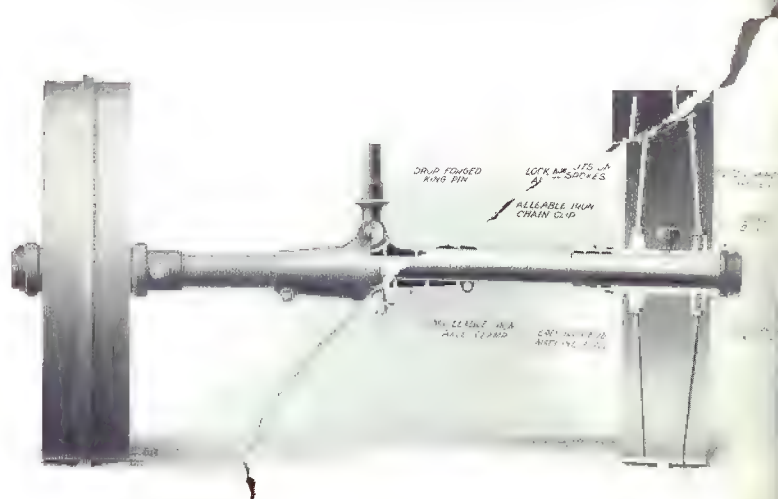
*The Simple Cylinder and Steam Chest* are cast in one piece of special close-grained iron, which insures a smooth, durable, and easily lubricated surface. To guard against boiler expansion all the cylinders of our engines overhang the frame, and are not bolted to the boiler or to a heater. The steam ports are of ample area to prevent "wire drawing," with all unnecessary clearance or waste space avoided.

*The Slide Valve* is the plain D style locomotive type. The valve and valve-seat on every engine are carefully machined to a true surface and then scraped by hand to insure a perfect steam-tight fit.

*The Piston* is a single hollow casting of sufficient width to give ample bearing and wearing surface. The piston rings are of improved form and self-adjusting. The piston rod is made of a selected grade of steel. The hole in the piston for the piston rod is bored to a standard taper and the piston head is forced on with a pressure of about twelve tons. As additional security a jam nut is put on and the end of the rod is then riveted over.

*The Cross-Head* is fitted with shoes, accurately turned to the same radius as the bore of the guides. The shoes can be easily adjusted by means of two screws at each end, so that the wear can be taken up and the piston rod kept in proper alinement.

*The Connecting Rod* is of the latest approved design of I-beam section, very strong and rigid, although light in

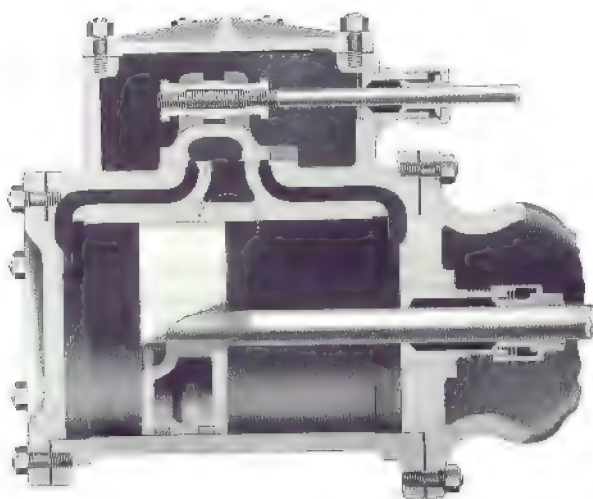


Engine Front Axle and Wheels, Shown Partly in Section



weight. It is forged from a single piece of steel without welds. Both ends are of the box form, no straps, gibs, or keys being used. It is made unusually long, about three and one-fourth times length of stroke, thereby lessening the angular thrust and reducing the friction between the cross-head shoes and guides. The connecting-rod boxes are made of phosphor bronze, the best anti-friction material obtainable.

*The Crank Disc* is of large size and properly proportioned to counterbalance the reciprocating parts. It is forced on the shaft by hydraulic pressure of at least fifteen tons, and afterwards a carefully fitted key is driven. The crank-pin is also pressed into the disc by heavy hydraulic pressure and afterwards riveted.

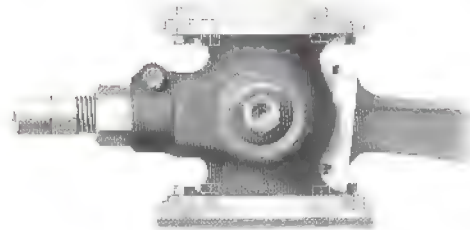


Sectional View of Simple Cylinder

*Valve Gear.* Our valve gear is a combination of simplicity and utility. We use a single eccentric securely keyed to the crank shaft to prevent slipping. The eccentric strap has an extended arm, pivoted to which is a block sliding in a guide. The position of the guide can be changed by the reverse lever, and the inclination or angle at which it is set determines the direction in which the engine is to run. The degree of this angle also fixes the point of cut-off, which governs the amount of steam admitted to the cylinder during each stroke. The eccentric strap is adjustable, as are also the guides for the block. The eccentric rod and valve rod are provided with brass boxes, with provision for taking up all wear, thus the wear on the entire valve gear can be readily cared for by the operator. Our valve motion can be reversed quickly under full head of steam without danger either to piston or valve gear.

*The Quadrant* is provided with notches at each end, that allow the operator to adjust the movement of the valve to conform to the work the engine is doing. The quadrant is also provided with a central notch, in which the engine will remain stationary should the throttle be opened by accident.

*The Case Oil Pump.* This pump for lubricating the steam cylinder acts on the force-feed principle. It is driven by the valve gear, and is a positive feeder under all variations of temperature. When the engine is not running,

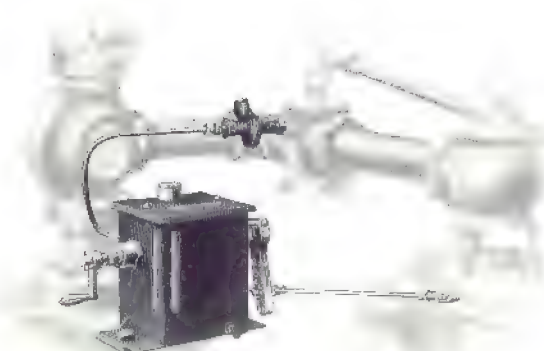


Cross Head

the pump ceases to act, thus economizing on oil, as there is no waste. It is easily adjusted to feed more or less, as conditions demand.

*The Flywheel* is of good proportion and serves as an excellent balance for the engine. The face of the flywheel is turned in a boring mill and is crowned to make the belt run true when using the engine for stationary work. It is within easy reach from the platform, but clear of the traction wheel. There is no difficulty in putting on or taking off the belt.

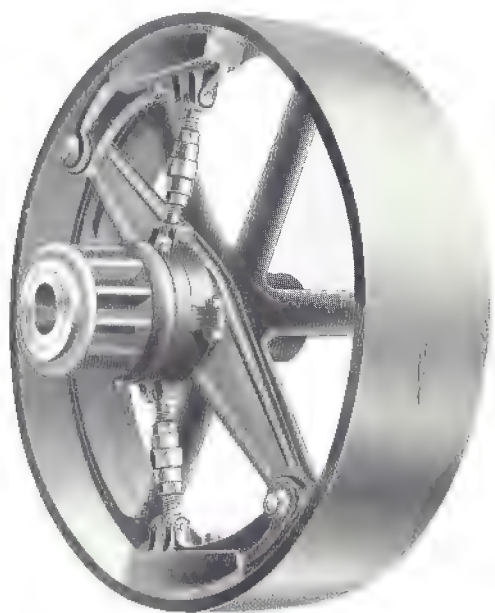
*The Clutch.* The friction clutch as used in these tractors is a most complete, efficient, and convenient device for the transmission of the power of the engine to the traction gearing. It is positive and reliable in its action and can be engaged or disengaged either when the engine is at rest or when running. By means of this clutch the engine can be instantly disconnected from the gearing when desired for belt power. Turn-buckles with lock-nuts are provided to keep in perfect adjustment the



Oil Pump

wooden shoes which bear against the rim of the flywheel. With our clutch the belt can be tightened when threshing. *Without reversing, the engine can be backed slowly, until the belt is as tight as desired and without loss of*





Clutch

*valuable time.* This feature is of no importance in the plowing engine, but it is of very great importance for the general purpose engine. The Case plowing engine is good for threshing, and *vice versa*. There is no other traction engine on the market that has all the general purpose qualities that Case engines have. These things are what make them so valuable, but not expensive.

In these few pages we have described some of the features of Case Steam Engines that must commend themselves to anyone in need of a reliable steam tractor. Only years of experience can produce the many refinements and practical labor-saving features that go to make a *real* steam engine. Tests in our laboratories, in our shops, and in the field; close association with the users — all these things have given us the knowledge which has enabled us to produce for you the very best steam engine.

Thus each year finds the Case Steam Tractor maintaining the high place it has held for so many years. It is a recognized fact that Case Tractors are leaders in the steam-tractor field. The Case policy has always been to do everything to maintain its reputation. The farmer has placed faith in our name, and we have placed faith in the farmer. So we can afford to build only the best.

Today you may go in any section of America, Canada, yes in Europe, South America, and the Philippines, and you will find Case Steam Tractors busily engaged in fulfilling the many farm requirements. They are measuring up to every claim we have ever made for them. Compare Case Engines with others, point by point, if you will.

Compare the details of construction, and we believe you will be convinced that while our statements are broad, they are nevertheless true.







Regular Wheel and Extension Rim

## Traction Wheels

AS the chain is no stronger than its weakest link, so a traction engine is no stronger than its wheels. We, therefore, have laid special stress on equipping our tractors with only such wheels as will stand the severest strains of general traction work. The rims are of steel with malleable iron or forged steel grouters. The spokes, of more than sufficient number to carry the loads, are inserted through the rims and securely screwed into extra large hubs. These are details of construction which one not familiar with the demands of this part of the engine would not look for. You can rely at all times on the fact that Case products are built with thoroughness, even in those parts which the operator will never see. In fact, that is why he never sees them, because they are built so that he has no occasion at any time to disturb them.

*Extension Rims for Traction Wheels.* For plowing or for use in any locality where the ground is soft or spongy, we furnish 8-inch or 12-inch extension rims for our 40-, 50-, 65- and 80-horsepower tractors, 12-inch rims only for the 110, and 8-inch rims for the 30. All these rims are built in the same way and of the same material as the regular wheels, and are attachable or detachable in a very short space of time.

*Freighting Wheels.* These wheels are essential to tractors used for hauling pur-

poses over rough or stony roads. The hubs, spokes, and tires are much heavier than the regular wheels, because the demands on them are greater. The spokes are thirty-two in number on the 30, forty on the 40, 50, and 65, and forty-eight on the 80. They are one inch in diameter, upset to  $1\frac{3}{8}$  inches at the threads. The tire is  $\frac{3}{4}$  of an inch thick; the gear braces are  $1\frac{1}{4}$  inches in diameter, held to the tire by  $1\frac{1}{4}$ -inch rivets. In place of the malleable iron grouters a special heavy grouter of steel is used on these freighting wheels, as it has greater wearing quality to withstand use over stony highways. We are prepared to furnish special freighting wheels for our 30-, 40-, 50-, 65-, and 80-horse engines. Our 110 is regularly equipped with wheels built along the same lines.

*Municipal Wheels.* There are certain municipalities which prohibit the use of traction engines on paved streets, except when equipped with flat grouters. This, of course, is to prevent injury to the pavement. We, therefore, can provide wheels to meet these requirements. These municipal wheels are of great weight in order to increase the traction power, which is somewhat lessened by the loss of the regular grouters. These wheels we can furnish for the 30-, 40-, 50-, 65-, 80-, and 110-horse engines on special orders and at additional prices.



Freighting Wheel



Municipal Wheel



## Case Gas and Oil Tractors

THE internal combustion engine — that is the engine burning gasoline and oil — is here to stay. It has proved its value under actual field conditions, doing the severe work a tractor is called on to do. Its development naturally began with the big tractor, because the farmers with enormous acreages were, by reason of that fact, far removed from railroads. The hauling of bulky fuel, such as coal, was naturally expensive. They therefore demanded tractors which could use fuel less expensive to procure. This gave rise to a demand for a gas tractor of great horsepower because of the work required. As the large gas tractor demonstrated that it could do satisfactorily the work required on the big farms, smaller farmers became interested, until now there is almost no farmer with over eighty acres of cultivated land that cannot use satisfactorily a well designed, well built, small tractor.

We can quote from one of the leading farm publications of the country, when it says: "The light tractor is here. It does the work and stands up under severe farm conditions and the farmer can safely invest in it if he makes a wise selection (note the condition), but out of some eighty machines in the market, I consider the good ones can be counted on the fingers of one hand." And farther on the authority says: "Emphatically, the light tractor has been made practical. But not all the light tractors on the market are practical. The farmer can afford one if

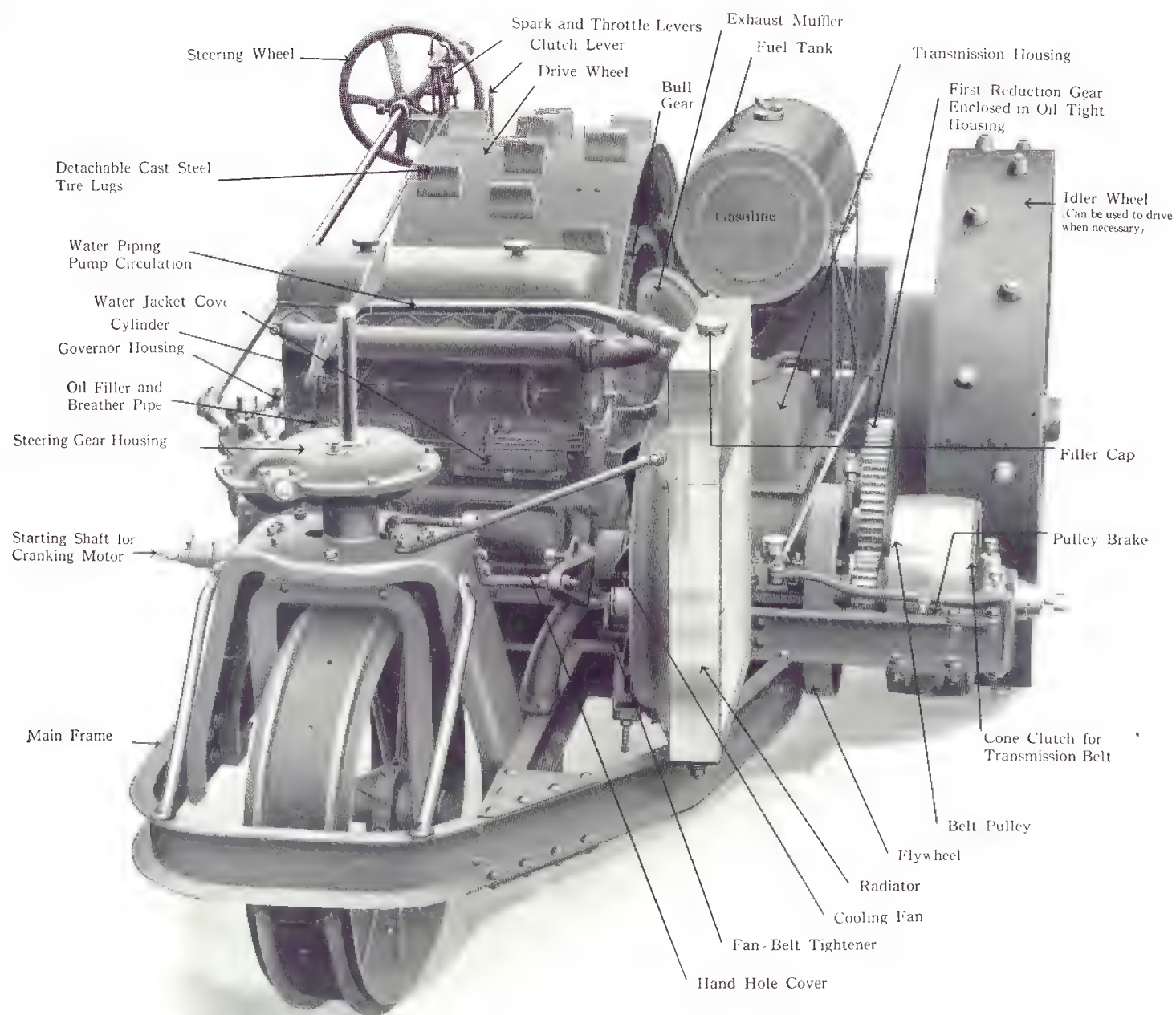
he pays enough money to get a good one (again note the condition), but he must be careful in making his choice."

"There is danger," he says, "in selecting a tractor too small for the work, too cheap, too novel in design. There especially is danger in the tractor made by a concern that lacks experience in either this or the farm implement field. And this caution may apply to manufacturers who have had wide experience with other kinds of machinery, but have hurried tractors onto the market without thoroughly studying the requirements of heavy farm power."

If these words had been written by a man on the Case payroll, they could, we believe, have been written with no greater endorsement or recommendation of the Case policy. We heartily agree in this point of view, and if you will study our tractor we believe that you will agree with us that we have been ultra-conscious in putting into these machines the "stuff" that will make them continue the reputation that this company bears for honest goods. Just remember that this company over twenty years ago began this work on the gas tractor, and since that time we have been slowly but constantly developing this form of power, until now we are firm in our opinion that the gas tractors described on the following pages cannot be equalled in excellence by any tractor offered the buying public today.

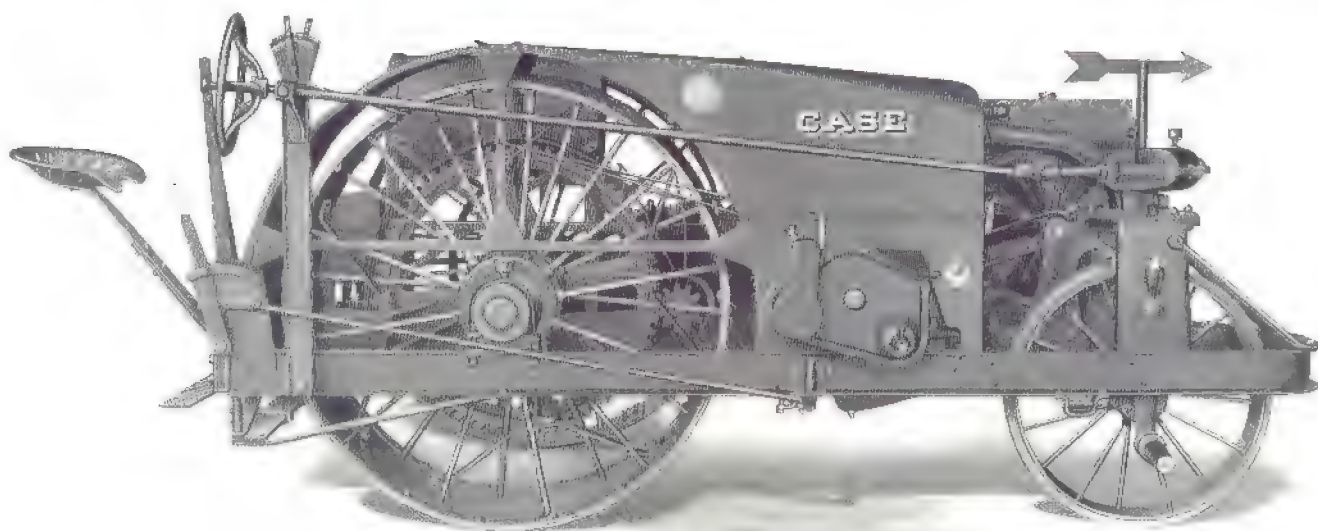






Three-quarter View of Case 10-20 Gas Tractor with Hood Removed





## *Case 10-20-Horsepower Gas Tractor*

**W**E quoted previously in this catalog an authority on the gas tractor development. You may remember that he said that out of some eighty different machines in the market he considered that the good ones could be counted on the fingers of one hand. In the following pages we show to you the Case Gas Tractors from "stem to stern," so that you may see exactly why these tractors are among those to be counted on the five fingers.

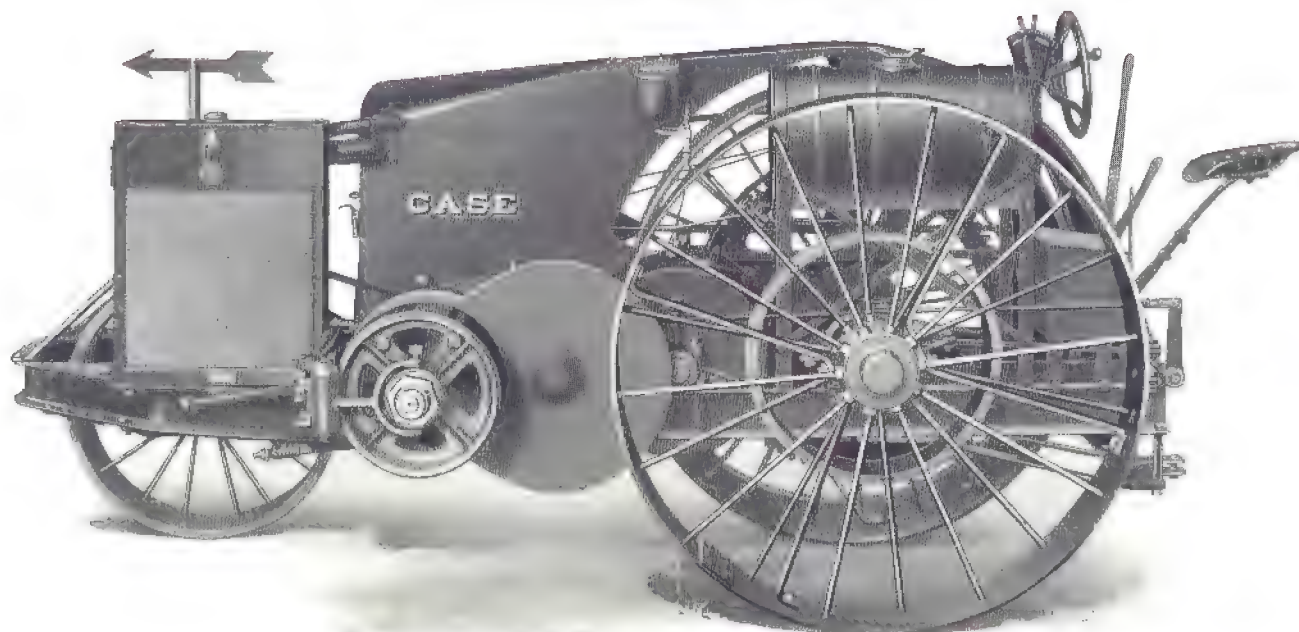
This 10-20, the smallest of our line, is in every respect designed and built for reliable, continuous service. By this service we mean real work over a number of years. No, we cannot give you the exact number of years, because no two men take the same care of a machine, and on the care given it largely depends its life. A manufacturer can make a tractor as excellently as possible, and it will soon

be a pile of junk if not cared for. Every machine is worthy of good care.

This 10-20 Tractor is no experiment. Its certainty was known to us before we put one on the market. For plowing, discing, harrowing, seeding, cultivating, reaping, threshing, etc., the farmer with a comparatively few acres under cultivation will surely find this machine a profit producer. And very vital, too, is the fact that it has no chance of becoming an "orphan." This company has been doing business since '42 — Think of it! When you need a repair part, you are very sure to get it. Just remember this when thinking of tractors.

Price, as shown, \$890.00 F. O. B. Racine, Wis. Ten per cent discount for cash.

*Prices quoted on pages 91 and 92*



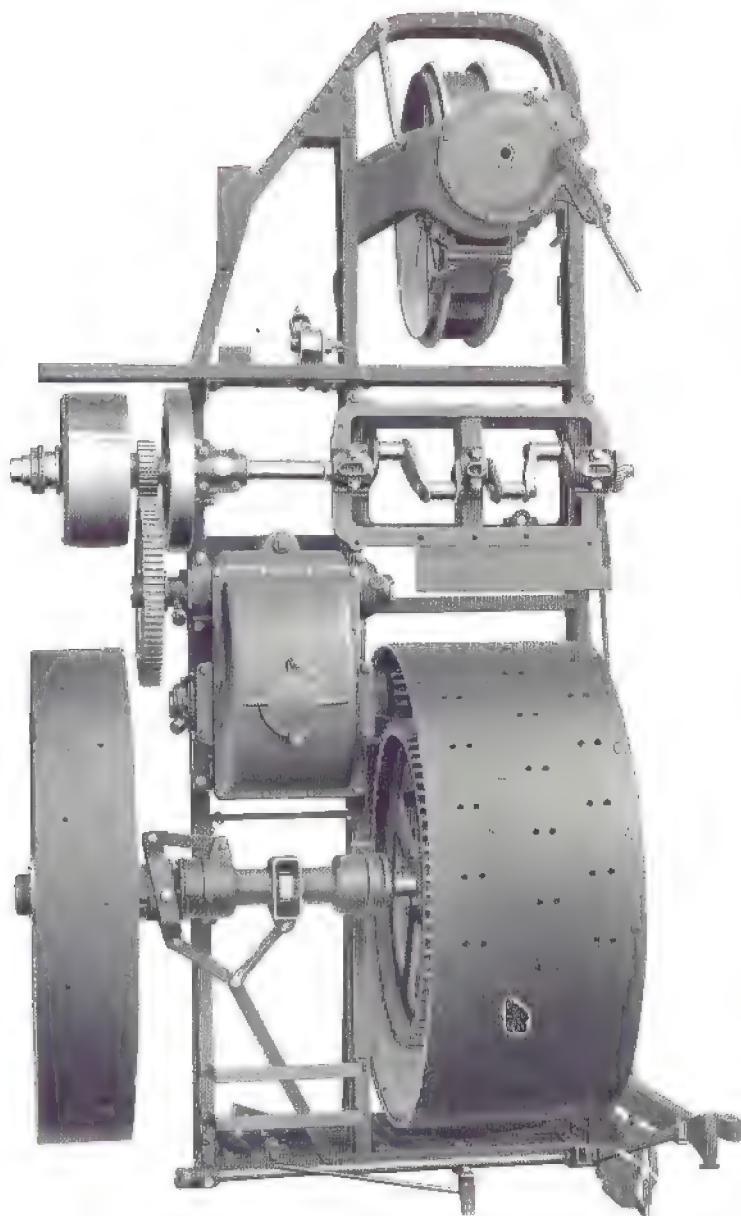


# Construction Details of the Case 10-20

## The Frame

**T**HE frame of this small tractor is made from one piece of channel bent into form by means of dies. This method of construction makes an especially rigid frame compared with that made up of separate channels, as it eliminates a great number of riveted joints.

It is constructed of 5-inch channels, cross-braced, and corners fitted with gusset plates to prevent deflection. Note in the illustration that the rear axle is provided with a cannon bearing extending between the main drive wheel and idler wheel and also another bearing placed outside the drive wheel. This axle is made of 3-inch 40 to 50 carbon steel, and operates on three Hyatt Roller Bearings. The axle is provided with a bearing on each side of the drive wheel, giving additional rigidity to the frame and also proper support of the main drive wheel through which all strains must pass.



Top View showing Frame Construction

A reservoir for holding lubricant is provided in the center of the bearing, which extends between the two wheels. These parts operate in an oil bath. A pressed steel cover is provided, which prevents loss of oil and also keeps out the dirt. The bearings are provided with felt washers to retain the lubricant. It would be difficult to construct a more substantial frame.

The pedestal, on which the yoke carrying the front wheel is mounted, has been made of heavy steel plate, formed to shape by means of dies. This method makes a very stiff construction and is far less liable to breakage than if a casting were used. It illustrates how the utmost care is used in planning each detail.

## Motor

**Motor**—Our investigation has shown that many of the motors in use give creditable performance as to the horsepower developed, although deficient in economy and accessibility. For this reason they do not measure up to Case standard.

With these factors in mind we started the design of a motor that would develop ample power, yet one which would be economical in the use of fuel, and the parts of which would likewise be accessible. Study this 10-20 motor point by point, and you will see how well we have accomplished our purpose.

The valves are located in the head, which secures a higher efficiency from the amount of fuel used.

The cylinder head is removable, making it an easy matter to clean out the combustion chamber from deposits of carbon, or when you want to regrind valves.

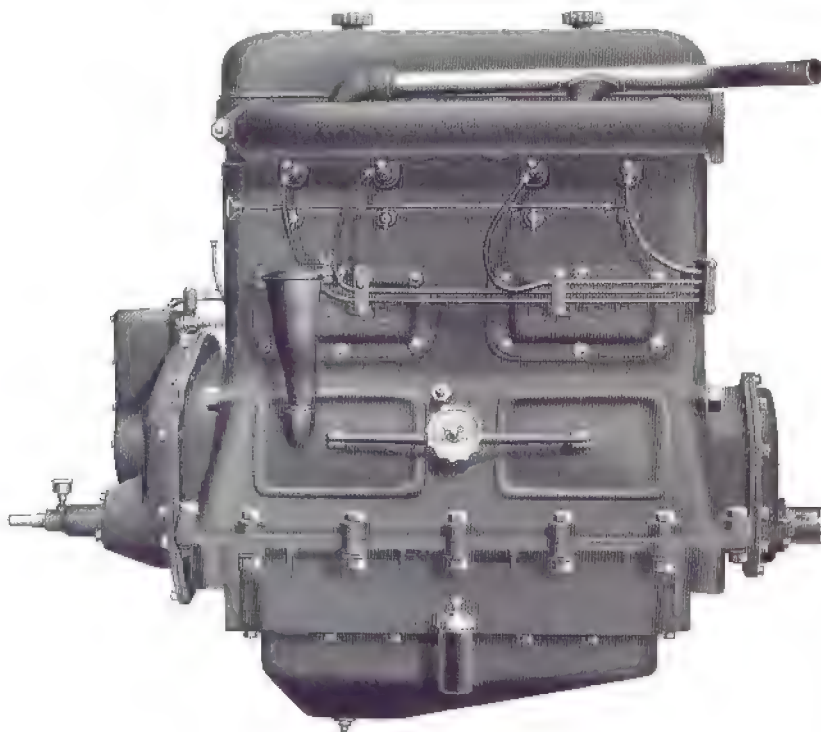
The valve stems are provided with guides which are removable. The valve stems, springs, and operating mechanism are entirely enclosed by a sheet metal cover, protecting these parts from dust. Connection is made to the underside of this cover by a passageway inside the cylinder casting, which passage connects with the crankcase. There is a sufficient oil spray working up through this passage to oil all these parts. This keeps all the valve stems and operating parts well lubricated.

The water jacket is provided with two handhole plates through which mud or sediment collecting in the water spaces can be readily removed. This is important, as there are times when it is impossible to secure clean water, and if sediment were allowed to collect in the jackets, it would cause trouble in cooling.

## Crank Case

**Crank case**—The upper half of the crank case and cylinders are cast en-bloc. The bearings for the crank shaft are contained in the lower half of the crank case with bearing caps placed on top. The upper half contains two handhole openings, provided with covers, so designed that they can be readily removed. Through these handhole openings it is possible to make any adjustment necessary on the crank





Left Side Motor

pin or main bearings of the motor without having parts to dismantle. This feature is another example of Case accessibility. All main and crank pin bearings on the motor are of the shell type, bronze backed and babbitt lined.

The cam shaft is forged in one piece with cams integral. All cams and the eccentric for operating oil pump are case hardened.

### Crank Shaft

The crank shaft is of the three-bearing type. It is drop forged, made of .35 carbon steel and heat treated. All the bearings are accurately ground to size. Extra large bearing surfaces have been provided, which increase the life of the bearings and make frequent take-up unnecessary. The shafts are accurately balanced before being placed in the motor.

The governor used is of the flyball type and is completely enclosed inside the crank case. By removing a small cover, access can be easily had to the governor. All wearing surfaces on this governor are case hardened and are driven direct by means of gears from the crank shafts.

### Connecting Rods

The connecting rods are drop forged of I-beam section. The crank pin end of the rod is provided with bronze backed, babbitt-lined bearings, while the upper end is provided with a solid bronze bushing.

### Pistons

The pistons are made of special grey iron of the same grade as used in casting the cylinders. They are machined, allowed to season, and ground to size.

The piston is made much longer than in automobile practice, better to withstand wear of the severe service

which tractor motors are required to perform. Three piston rings are used, and the piston is grooved and drilled with holes to prevent an excessive amount of oil passing the pistons.

### Lubrication

The lubrication of the motor is taken care of by a plunger pump operating direct from the cam shaft. The oil from this pump passes through a gauge in full sight of the operator, and from there distributes the oil first to the three main bearings of the crank shaft, and then overflows to the sheet metal pans underneath each crank pin. The lower half of the crank pin bearing is provided with a scoop which splashes oil to lubricate the cylinders and other parts of the motor. When the oil reaches a certain level in the pans, it is returned to the underpan which holds a reserve supply and before reaching the pump is passed through a screen.

### Clutch

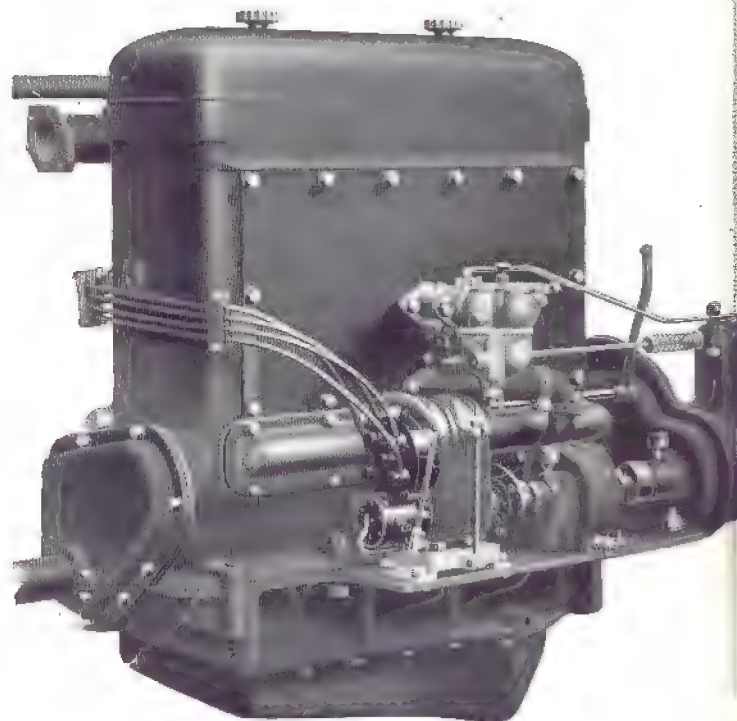
The clutch used on the Case 10-20 is of the cone type. The driving member is lined with non-burn asbestos clutch lining. The clutch is operated by means of a hand lever from the operator's seat. This one clutch is used for belt or for transmission when the tractor is on the road. This type of clutch is simple and effective.

### Ignition

The ignition is by means of a high-grade magneto of the dual type, i. e. dry batteries, are used for starting only. Magneto, batteries and wiring are protected by a metal hood which extends over the motor.

### Transmission

In the transmission there are only three pairs of spur gears all of which are cut gears, with the exception of the



Three-quarter View





Side View Showing Cylinders, Cylinder Head, and Cover

master pinion and gear. With the exception of the master gears all gears operate in oil and are equipped with dust-proof housing.

*All shafts* are made of carbon steel, heat treated. The transmission shaft bearings are of the removable bronze bushed type. The bearing next to the bull pinion on which the greatest driving strain is imposed, has been equipped with the Hyatt High Duty bearing, which type eliminates all wear and adds to the efficiency of the tractor. The master pinion is made of steel, case hardened. It is fastened to its shaft so that it can readily be replaced.

A high-duty roller chain is used for the reverse speed of the tractor. The reverse mechanism consists of a double jaw clutch, and movement of this clutch to its center position throws the gear into neutral. A movement in one direction connects the spur gears for going ahead, and a movement in the opposite direction connects to chain, to back the tractor.

*Jaw clutch.* The movement of the jaw clutch is accomplished by one lever only, making it necessary to move into neutral position before changing directions in which the tractor is moving. This eliminates the possibility of causing injury to the transmission gears while reversing. The double jaw clutch, the pinion and sprocket to which it engages, are made of steel, case hardened. Directly next to the flywheel is a bearing independent of the main engine bearing which takes the strains of the belt pulley together with what strains are caused by the first set of transmission gears.

### The Belt Pulley

Not only should the small tractor be used for traction but it should also be equally well adapted for performing all classes of work to which it can be belted.

A well-known agricultural authority recently said, "In

most designs of tractors no care has been given to the accessibility of the belt pulley."

In our construction there is nothing to interfere with the belt. A brake, provided for this pulley, is connected to the lever which operates the clutch. This brake is used to stop rotation of belt pulley when necessary to stop machinery which may be driven suddenly, or is used for a brake on the entire tractor when transmission gears are in mesh.

### Drive Wheels

*Drive wheels.* The two main drive wheels are of the same diameter, but of different widths, one being 10 inches wide and the other 22 inches wide. The width of these wheels is such that the unit pressures exerted on the ground are approximately alike.

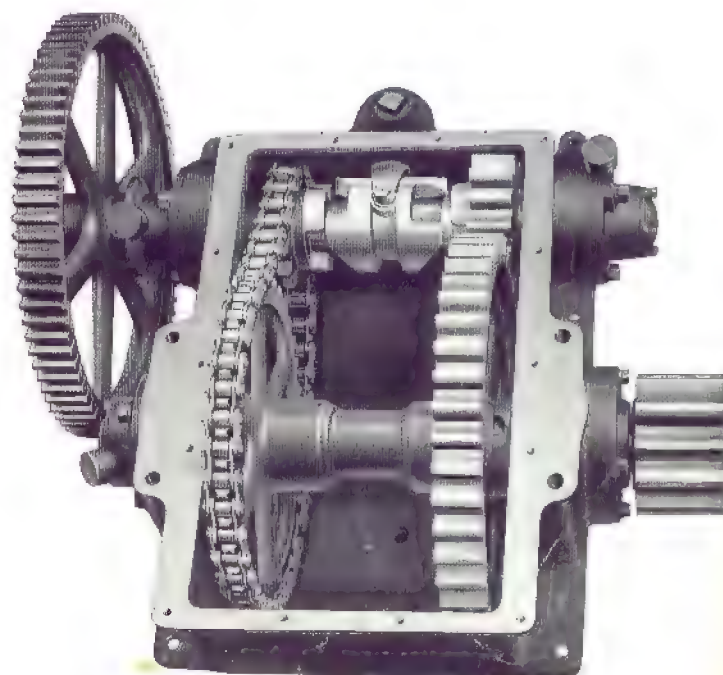
Ordinarily the drive is to the wide wheel only, the third wheel being loose on the axle. Provision, however, is provided by means of which this wheel can be clutched to axle, causing both wheels to be driven. This feature is a very important one in a tractor of this type, as in hard places it gives additional traction, and should the idler wheel drop in a hole or rut, it would be impossible to get out without this feature.

The clutch driving this wheel is arranged so that it can be thrown in or out by the operator without leaving his seat. The front wheel axle is provided with leather dust bands which prevent dirt from entering.

The movement of the steering wheel is controlled by means of a worm and worm wheel, which parts operate in oil inside of a dust-proof housing.

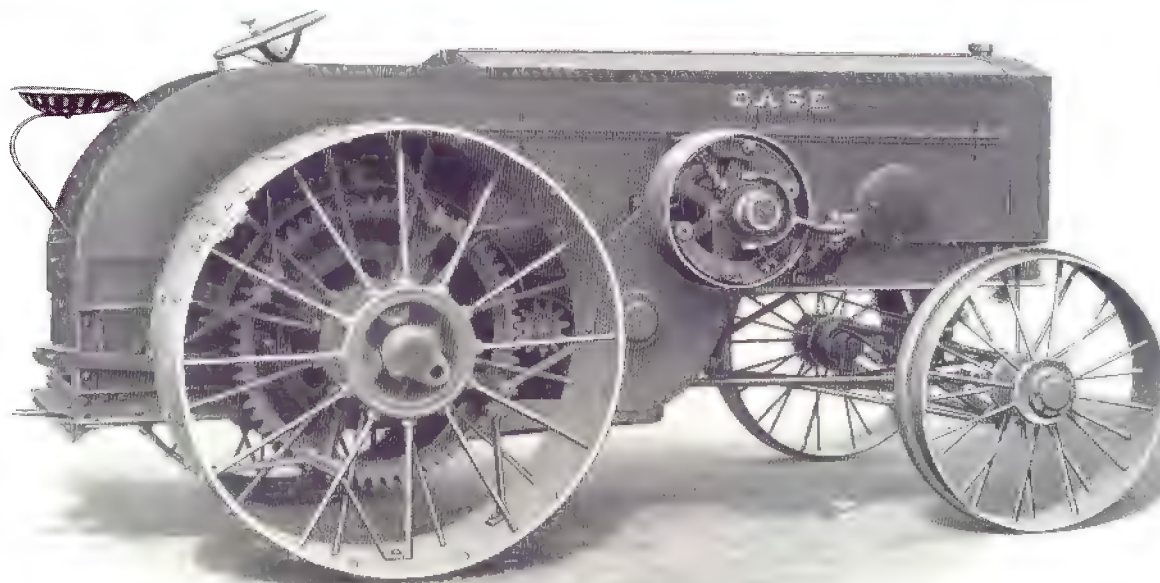
### Cooling

*The cooling* of the motor is by means of a high-grade truck-type radiator, provided with a fan, and pump circulation.



Transmission





## Case 12-25-Horsepower Gas Tractor

**T**HIS tractor, built to pull four plows under normal circumstances, and do all farm work in the same proportion, was one of the first gas tractors of the smaller size. It immediately found a ready market. At no time have we had enough to supply the demand.

And why?

Because the wise farmer who saw that he had to have a gas tractor knew that it would be economy to have a good one. When any one spoke of a good tractor, he at once thought of Case.

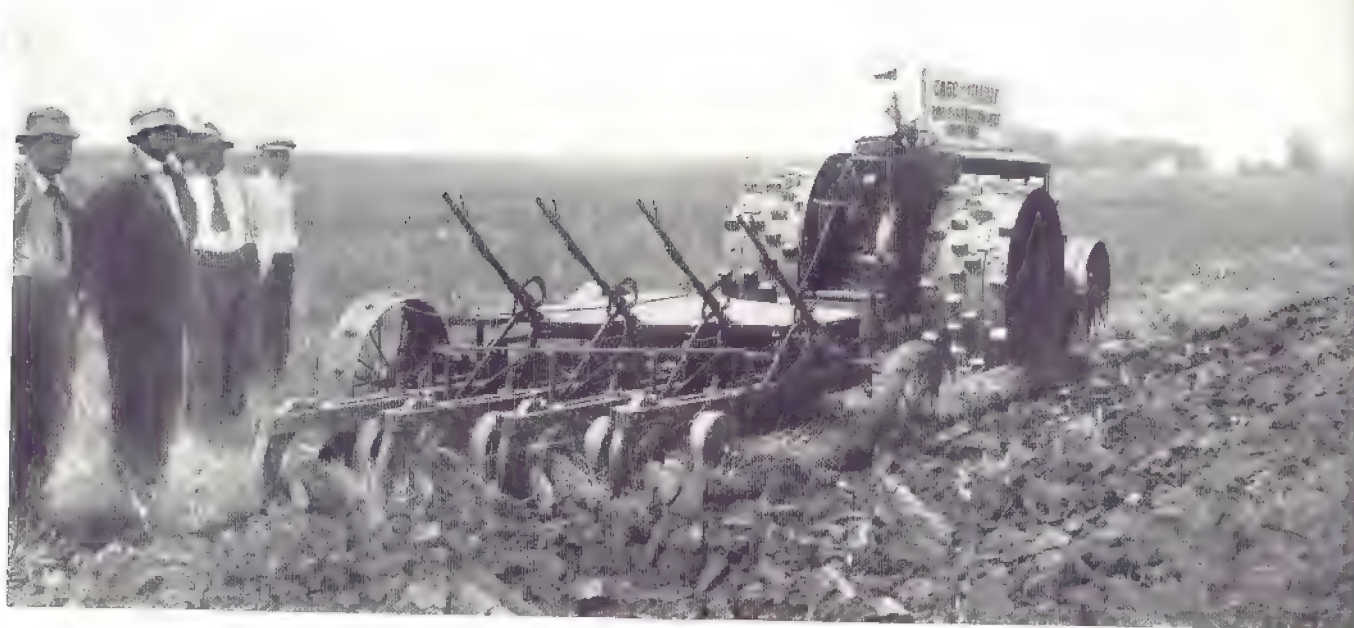
Stop a moment at these figures. The average cost of a

farm horse from 1891 to 1896 was \$51.73, and from 1910 to 1915 it was \$107.34. Think what it will be with the depleted supply of horses after the European war! And here's one more figure for you to think over. The average cost of oats from 1895 to 1899 was 22 cents per bushel; from 1910 to 1914, it was 38.8 cents.

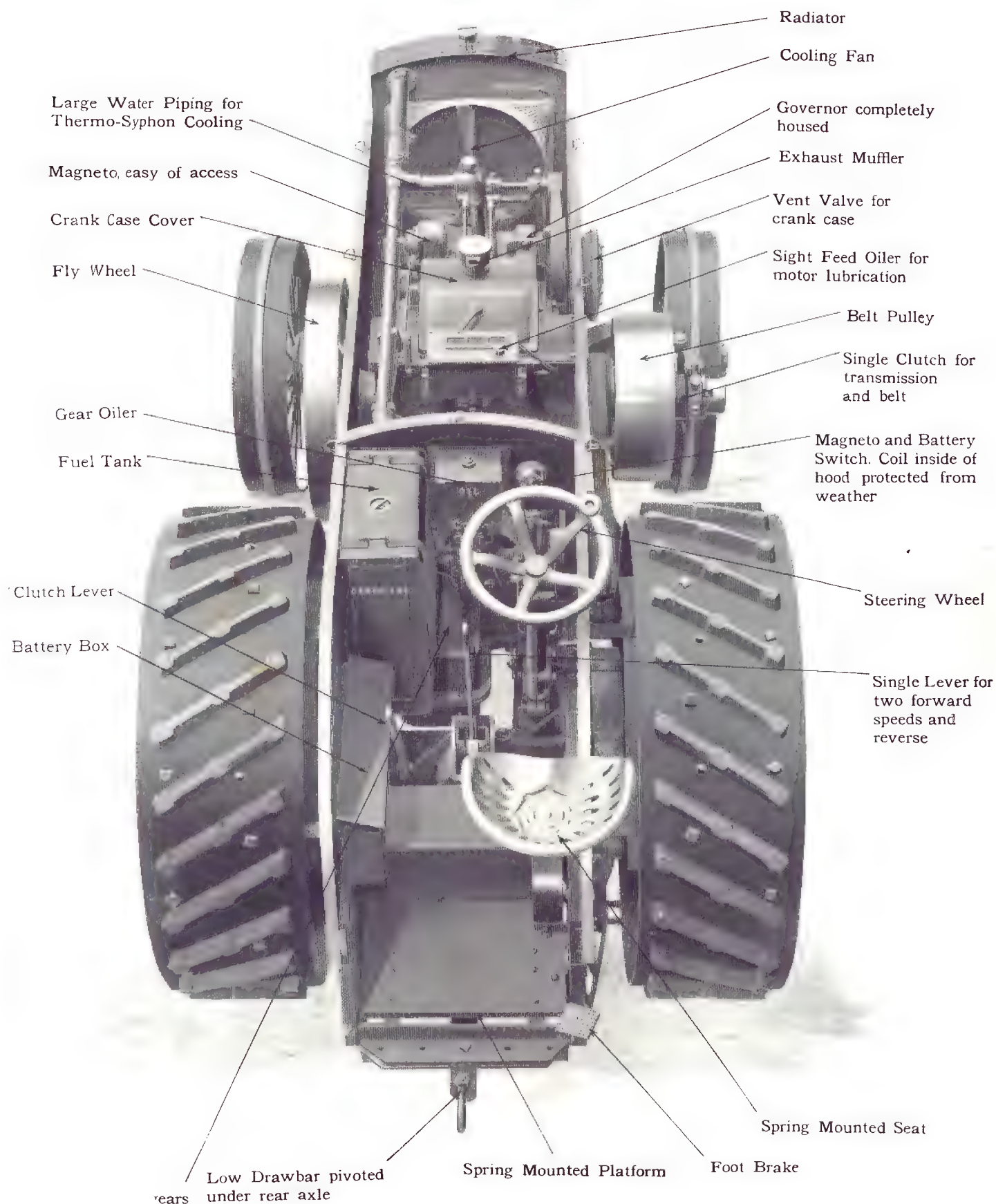
What does all this mean? That the American farmer who watches what it costs him to do his work, must have less expensive power. This means a reliable tractor—not a tractor, but a *reliable* tractor. Get the difference.

Price, as shown above, \$1350.00 F. O. B. Racine, Wis. Ten percent discount for cash.

*Prices quoted on pages 91 and 92*







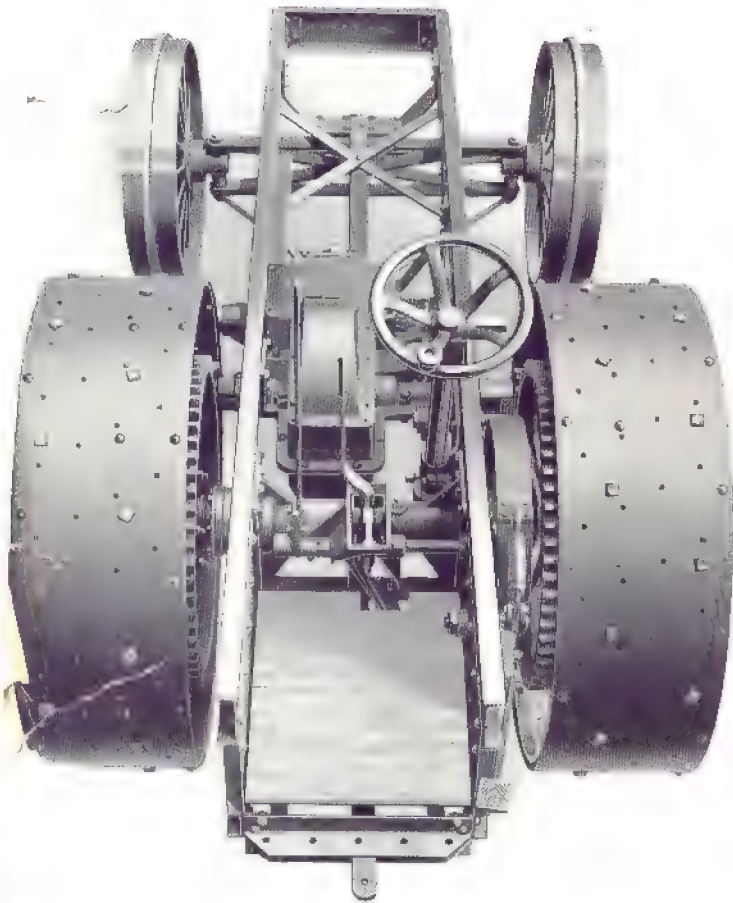
Top View of Case 12-25 Gas Tractor with Hood Removed



# General Description

## Frame

**T**HE Frame is of steel channels diagonally braced. In this tractor we use a cannon-bearing construction for the rear axle, the same as has been found so successful



Top View of Frame

on our steam engines and other gas tractors. By this design the entire frame is strengthened and stiffened. It is impossible for the rear axle to get out of alignment with the frame or transmission shafts.

*The Hitch* is so arranged that the pull is directly from below the rear axle, which in combination with the proper distribution of weight, has the tendency to keep the tractor close to the ground, which is not characteristic of "light-weight" tractors.

*The Draw-Bar* is located about eighteen inches from the ground. It has been found that this is the best height for the hitch in plowing and hauling, as it allows the platform of the tractor to be located approximately at the same height as that of the plows. This feature is of distinct use in the one-man outfit, as he then can step

from the platform of the tractor to the plow very easily, making the operation of both machines very simple. With our effective steering device, this tractor with our automatic lift gang plow — comes about as near to a "no-man" outfit as possible.

*The Motor* is held to the frame by turned bolts. It is held permanently and designed so as not to be necessary to slide the motor on the frame for reversing or belt work.

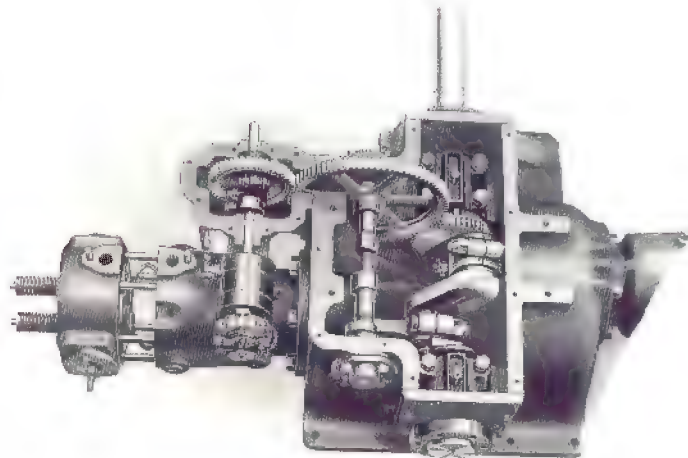
*The Front Axle*, which is of the automobile type, is entirely of steel and is hung from the frame at one point, giving as a result a three-point suspension for the truck. This design allows for moving over rough ground with the least strain.

## Crank Case

*The Crank Case* is a single piece casting with cylinders bolted on. The turned parts of the cylinders are fitted into bored recesses on the crank case. This construction makes it impossible for the cylinders to get out of line. It further makes inexpensive renewals of the parts in case such becomes necessary, as the whole crank case does not have to be removed. It also makes their removal very simple.

The crank case is designed so that the crank shaft can be taken out with the removal of very few parts, and without touching any vital parts or adjustments. The main bearings are interchangeable, removable die cast babbitt shells, held in place with shims so that the wear on these bearings can be taken up.

*The Cam Shafts and Cam Gears* are entirely enclosed but readily accessible. We call your attention to the cover, which is simply lifted off in order to gain access to the inside of the crank case.



Motor with Crank Case Cover Removed



## Crank Shaft

This shaft is drop forging, accurately ground to proper size. It has extra large bearings for the shaft and crank pins. The cam shaft is a drop forging with cams integral; all cams are case hardened glass hard. The cams are ground to proper profile on a specially designed and constructed machine, guaranteeing absolute accuracy of timing.

*The Gear* operating the cam shaft, the one keyed to the crank shaft, is drop forged with machine-cut teeth. The gear attached to the cam shaft is semi-steel with machine-cut teeth. With this construction — steel gear on the crank shaft—should conditions be such as to result in the stripping of the teeth of any gear, it will always happen to those of the cam shaft. This gear is particularly easy to replace.

*The Governor* on the motor is driven by a spur gear which meshes into cam shaft gear. The governor

is entirely enclosed, preventing dust and dirt from disturbing its action. One end of the shaft, which drives the governor, is connected to the magneto with a flexible coupling, and the other end by a pulley which drives the radiator fan. The simplicity which results from this sort of construction (three straight spur gears for driving cam shaft, governor, magneto, and radiator fan) differs largely from that found in many other small tractors. It illustrates simply our aim to make our product as simple and easily operated as is possible.

## Connecting Rods

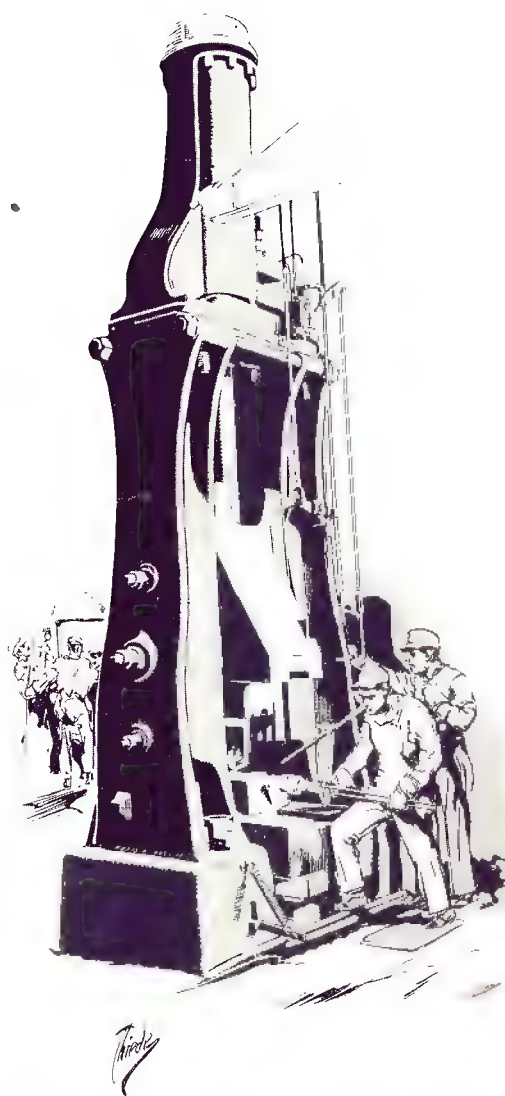
*The Connecting Rods* are drop forged I-section. The piston ends are fitted with special hard bronze bushings and the crank pin end with genuine nickel babbitt shells bronze backed. The cap on the crank end is provided with metal shims for taking up the wear.

## Pistons

*The Pistons* are of grey iron of special formula, rough-machined, allowed to season, then finished and ground to accurate limits. Each pin is held in the piston by means of a key on one end which prevents its turning, and on the other end by a cap screw provided with a metal lock. The end of the screw fits a hole provided in the piston pin. This screw prevents the piston pin from moving lengthwise in the piston. By thus holding the pin from longitudinal motion at one end the expansion due to heating cannot distort the piston.

## Cylinder Head

The construction of this part is such that it is not necessary for a water-tight joint between the cylinder head and the cylinder. The head is packed from the explosion chamber of the cylinder by means of copper asbestos gasket fitted into a male and female joint. The water passages to and from them are contained in castings provided with double ports communicating with like ports in cylinders and heads. The cylinder head is built so that the water jacketing extends around the valve stems and seats. This feature is most important because it prevents the warping of the valve and the subsequent leakage which would necessitate frequent regrinding. The valves being contained in the head allows an ideal form of combustion chamber, as it leaves no pockets in which the fuel collects, and therefore it gives the maximum economy and power. The valves are of nickel steel heads with carbon steel stems. The ends of valve stem are operated by tappet arms, both case hardened. The whole valve mechanism is of directly simple design with great attention being paid to their "get-at-ability" and "removability." All parts have liberal bearing surfaces and liberal lubrication provisions. We have not stinted on any part which would in the slightest degree contribute to the extension of the life of these tractors.

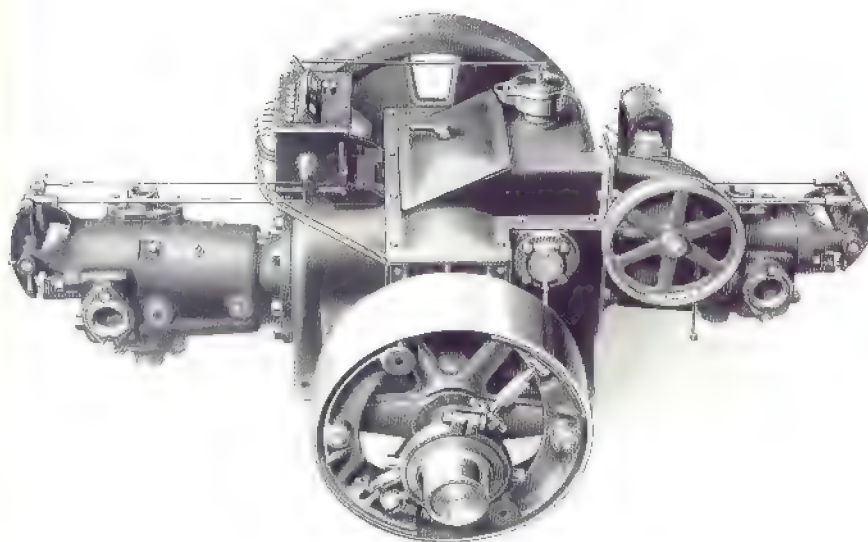


A View of the big 8,000-pound Steam Hammer in our Blacksmith Shop. Seven steam hammers, similar to the above, are used by this department in forging out the gears, cam shafts, crank shafts, connecting rods and many other forged parts used in Case Products. Modern methods and modern machines mean better products at a lower price



## Lubrication

The motor is lubricated by means of a six-feed positively driven oil pump, which supplies all oil for cylinders, main bearings, cam shaft, crank shaft bearings and crank pins. The pump is located so that the operator can see the amount of oil which is being fed to each individual bearing. Crank pin oiling is cared for by centrifugal oil rings which take discharged oil from the main and cam shaft bearings. This oil enters the rings through separate channels so that should either one become blocked, or the oil fail to flow, the other one feeds sufficient oil to care for the part to be lubricated. Our lubricating system, we believe, is much more saving than what is generally known as the splash system. It has the further advantage that fresh oil is always supplied to the motor. Further, by this system the oil supplied to the motor, which finds its way to the lower part of the crank case, can be taken out by the means of a drain cock so provided. This oil then can be used (and we recommend its being used) for oiling the master gears and the rest of the transmission.



Clutch Side of Motor

## Clutch

*The Clutch*, similar to that on the 40, is of the friction type. We use only one clutch in belt and transmission work. Is it necessary again to point out the desirability of a tractor in which the parts are so reduced as to get along more efficiently with the least number of parts? This is one of the instances in which this aim of our designer is shown. The brake shoes in this clutch have particularly large bearing surfaces and are lined with asbestos brake lining. The wear on the clutch shoes can readily be taken up by turning a long right and left hand nut over the eye-bolts by which the shoes are operated.

Connected to the same lever which operates the clutch is a powerful brake which is applied directly to the outside

of the belt pulley. This can be used to stop immediately the rotation of the pulley when used for belt work or when transmission gears are in mesh.

## Ignition

*The Ignition* of this tractor is the same as used on the 20-40 described on page 41.

## Speed Changing

This tractor is provided with two speeds, one which develops about  $1\frac{3}{4}$  miles per hour, and the other about 2.2 miles per hour. This tractor is provided with two speeds. The hardest work naturally falls on it when plowing. In breaking and in stubble plowing, with the same number of plows, the low speed is used for the former and the high speed for the latter and all other field operations. Some light duty tractors we know are so designed as to operate up to four miles an hour. This policy we believe is wrong, as it is most extravagant and is unproductive of the best results.

## Cooling System

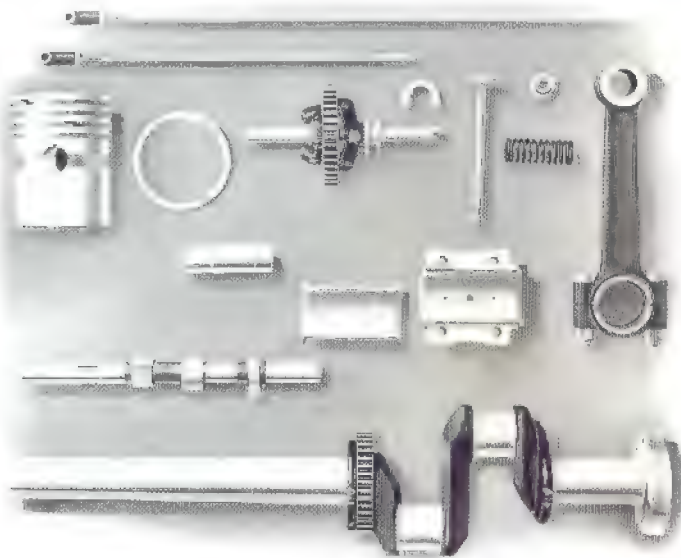
*The Circulation* of the cooling water is done by the Thermo-Syphon system. The radiator is of the heavy truck type, the air being circulated through it by the use of a fan. This system of radiation has been put on the tractor in order to keep the whole tractor low, allowing it to be used in orchard cultivation. The cooling system is so efficient that the tractor can be worked all day very hard with the use of only a few pounds of water. In cold weather the usual automobile anti-freezing mixtures can be used.

## Transmission

*The Transmission* from the crank case to the first transmission shaft is by a high-grade nickel steel roller chain having a guaranteed tensile strength of 28,000 pounds, while the severest strain which can possibly be put on it from the motor of this tractor is 1000 pounds, giving a factor of safety, therefore, of 28. This feature is characteristic of Case design and construction, as we have figured all the way through on maximum strength to give maximum service. The sprocket pinion on crank shaft is bronze bushed, with machine cut teeth and case hardened. The sprocket wheel on the first transmission shaft also has machine cut teeth, made of cast steel.

We want to point out to you the details of this construction, because we believe they are significant. The chain is not placed vertically, but runs at an angle. This, in connection with rotation of the motor, takes care of all wear on the chain and sprockets without resorting to an idler. The chain and sockets are entirely enclosed by sheet





Motor Parts

it is used at the point of the greatest load. This feature again illustrates the points which we so often have repeated, that you cannot judge the value of Case tractors by their appearance. There are two ways of judging them, one is by laboratory tests, and the other is by tests in the field. Whichever one you use we maintain that you will find these machines thorough in every particular, where careful designing and honest manufacture can make them.

Each Case tractor, when finished, is a masterpiece, embodying only the features that over twenty years of gas tractor experience has taught us will best prove practical.

Why, then, insist on lesser quality? Why buy a tractor that has fewer years of experience back of it? Too many tractors, with but little or no experience back of them, have been sold to farmers. Many of these have proven disastrous investments, and the farmers were the losers. Avoid the "orphan" tractor built by the concern you do not know.

"Buy the reputation of the maker," quotes one of the leading agricultural authorities. Buy from the company whose reputation is always at stake and who must be sure of its product before it is put on the market.

Our world-wide organization is back of Case Tractors. Forty-four branches and 9,000 dealers carry Case Machinery. And this organization has been built up because farmers placed faith in Case and Case placed faith in the farmers. This reputation is a safe guide in buying good tractors.

We ask you to make comparisons with other makes of tractors. We know that if you will judge the quality of materials, the excellent workmanship, the simplicity of design, etc., of Case Tractors, you can honestly say, "Here is the tractor I want."

metal casing, oil tight, which permits them to run constantly in an oil bath. Felt collars are provided to care for the possibility of a leak by running parts. At the same time this casing is so made that with the removing of a few bolts the inside working parts are easily reached. The differential gears, reverse gears and change speed pinions are housed in a cast-iron case, oil-tight, which, too, allows them to run in a bath of oil. The driving pinions are all cast steel, as are the two large bevel gears and pinions of the differential gear. The other gears are of our famous semi-steel mixture.

The Case which holds the shafts for the transmission is parted on the center line, so that the lower half can be dropped, when inspection of the parts contained is necessary. All gears inside this case have teeth accurately cut. The pinion used for change of speed is mounted on a square shaft which eliminates all feathers and keys. This type of construction is found in automobiles of the highest type. One lever is used for changing speed and reversing, and another for operating the main transmission clutch and brake.

## Roller Bearings

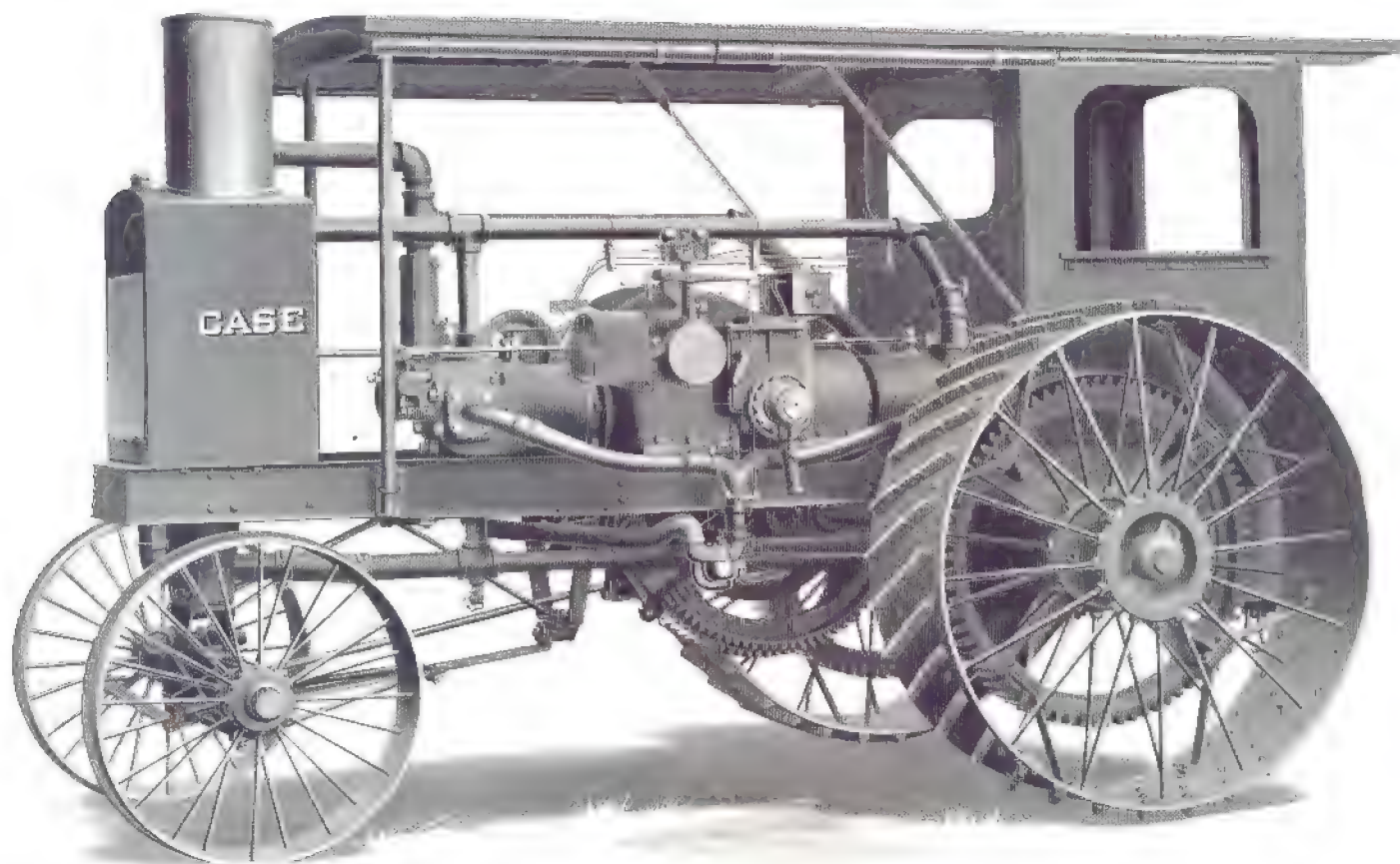
The Rear Axle Bearings are provided with high-grade roller bearings, each of which is provided with felt washers which retain the oil indefinitely. The casting in which these bearings are contained is of the cannon type. This is built with an extra large chamber completely surrounding and enclosing the shaft, and when once supplied with oil requires no further attention for three or four months. The front wheels are provided with a high grade roller bearing and felt washers to retain the lubricant.

The Axle Stubs are of high-grade special steel, which in combination with the roller bearings, eliminates almost all the wear. We are aware, however, that some tractor manufacturers in the past have used anti-friction bearings on their transmission shafts where the pressure is light, but we believe that the greatest saving is attained when



Transmission





## *Case 20-40-Horsepower Gas and Oil Tractor*

**I**N buying a machine you are up against the proposition of buying on faith. You may know a good deal about machinery, but you must trust the maker for those parts that you cannot see. There are many places where a machine can be skimmed and you would never know it until you had found it out in actual work. The crank shaft, the bearings, the cam shafts, for instance, may look splendid, but they may be worthless unless made of the proper material. Do you know exactly the material of which a crank shaft should be made? And also that of the bearings and the cam shafts, and a thousand and one other parts throughout a tractor? In our automobile we refer to those parts of Case cars as their

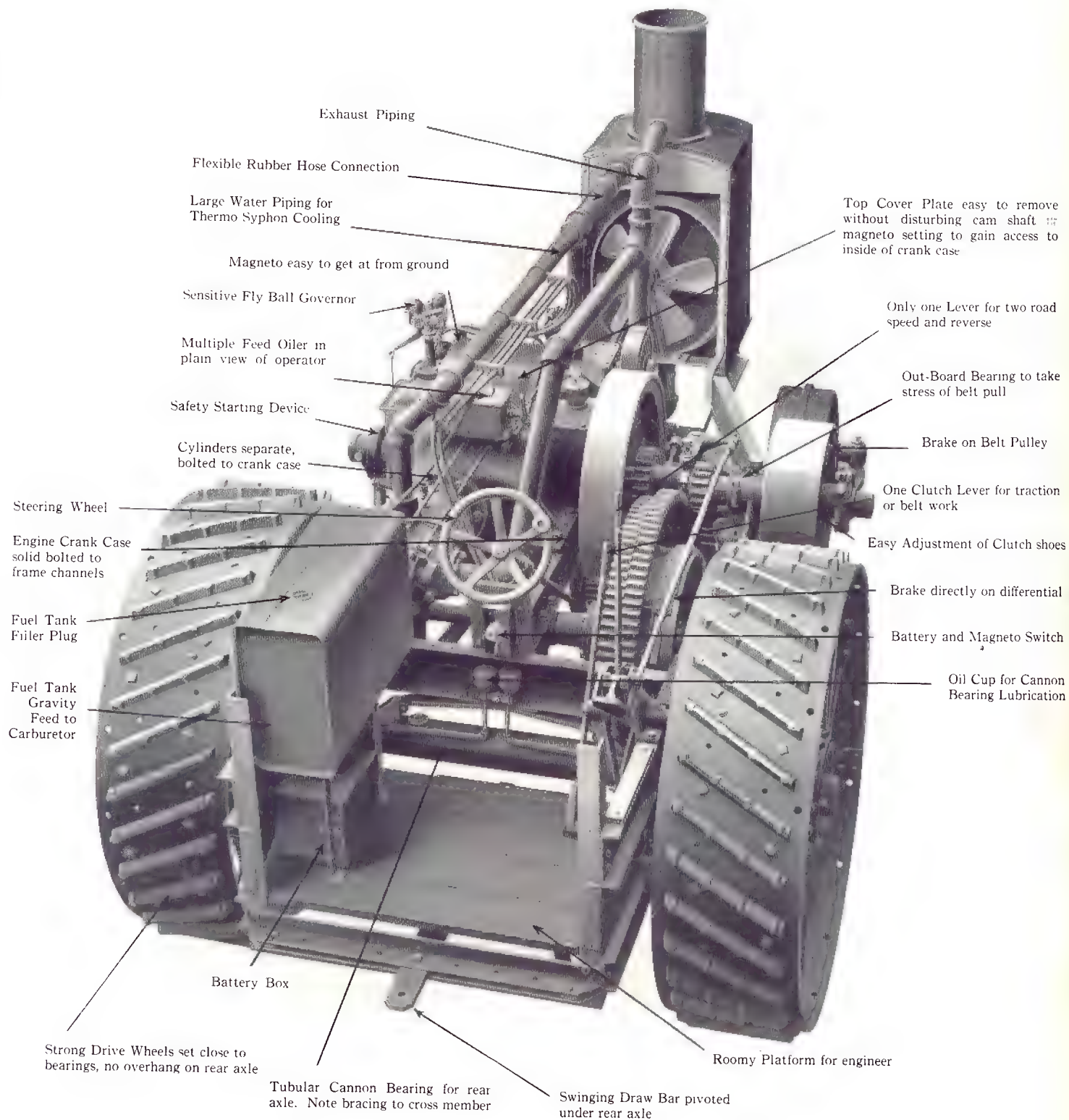
"hidden values." It is these hidden values that have brought people to rely absolutely on the serviceability of Case cars. The same thing is found in Case tractors. In these tractors you are taking no chances. You know that simply because they bear the name Case, they have in them only that stuff that has proved itself best in each and every part.

This 40-horsepower tractor has added fame to a famous name by bearing out our statement, that we do no experimenting at the cost of the consumer. All experiments are made before the machines are sent into the field. Price, as shown above, \$2000.00 F. O. B. Racine, Wis. Ten percent discount for cash.

*Prices quoted on pages 91 and 92*







Three-quarter Top View Case 20-40 Gas and Oil Tractor



# Construction

## The Frame

WE have laid special stress on the firmness of the construction of this part of the tractor, because the mechanical accuracy of the different parts of the tractor depends upon their security. Their security in turn depends upon the steadiness of the frame. It is the foundation upon which rests the super-structure. It is, therefore, built with very close attention to rigidity and simplicity. It is built of steel channel sections, all connections being hot riveted.

In our construction we want to call your very close notice to the bearing for the rear axle, which is of the cannon type, composed of one casting bolted to the side channels of frame. With this design and construction it is impossible for the rear axle to get out of line. Cannon bearing construction such as this adds strength to the entire frame, which is not the case when separate bearings

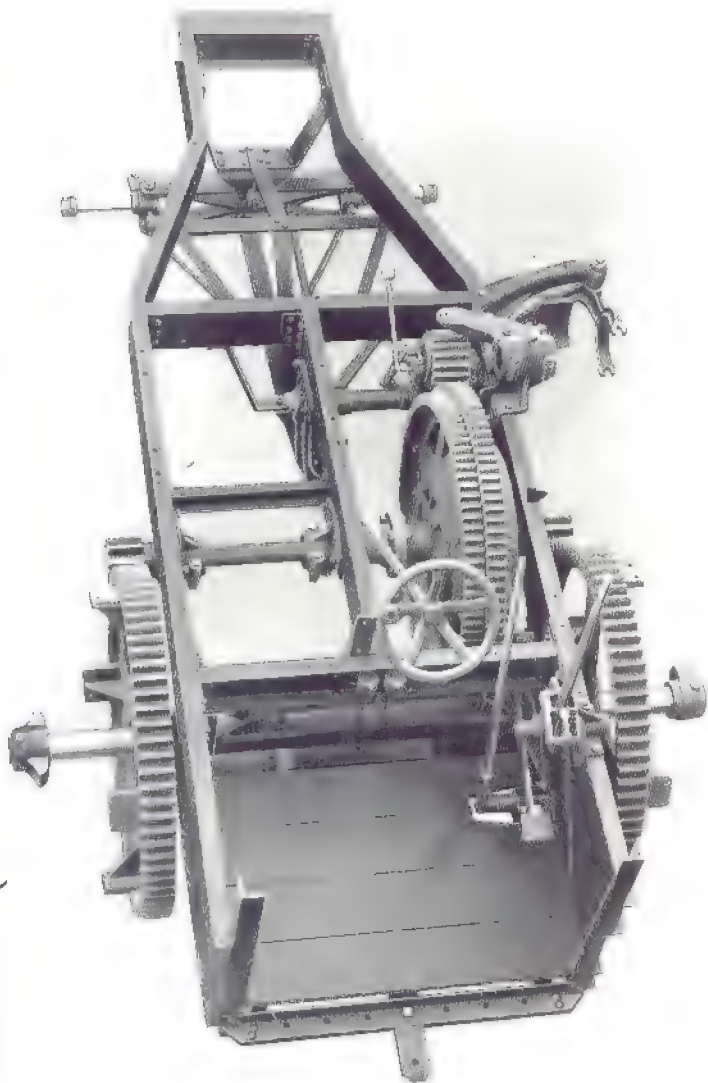
are used. This cannon or rear axle bearing is bolted to and built with the frame. This bearing is a one-piece casting recessed by the use of a larger core to allow for the storage of a generous amount of lubricating material.

*The Draw-Bar Pull—the Hitch* is designed for direct pull from the frame without causing any twisting in the frame. If this precaution had not been taken, each slight distortion of the frame would have tended to produce bad results as when the frame gets out of line those parts which rest on it are disturbed, and when the position of the motor or any of the vital parts is altered the result is an unequal load on some other part. This results in one part being overworked, while some other part is underworked, meaning therefore, unequal wearing. In order to be sure that this feature of sturdiness is gained, counterbracing is used throughout the frame and with particular reference to the pull, so that the hitch is not from the rear of the frame, but from just below the countershaft.

*The Motor* is held to the frame by four turned bolts, which does away with racking and loosening, causing mechanical disturbances. This method of securing the motor to the frame is a more expensive one than is generally found in gas tractors, but it is one of those features which guarantee life to the tractor and that is what the judicious buyer is after. It is one of those things which does not show unless one knows how these things should be done. Some are apt to think that a cheap tractor is just as good as a more expensive one. This is where the money goes, and money spent this way is an insurance for the permanency of your investment.

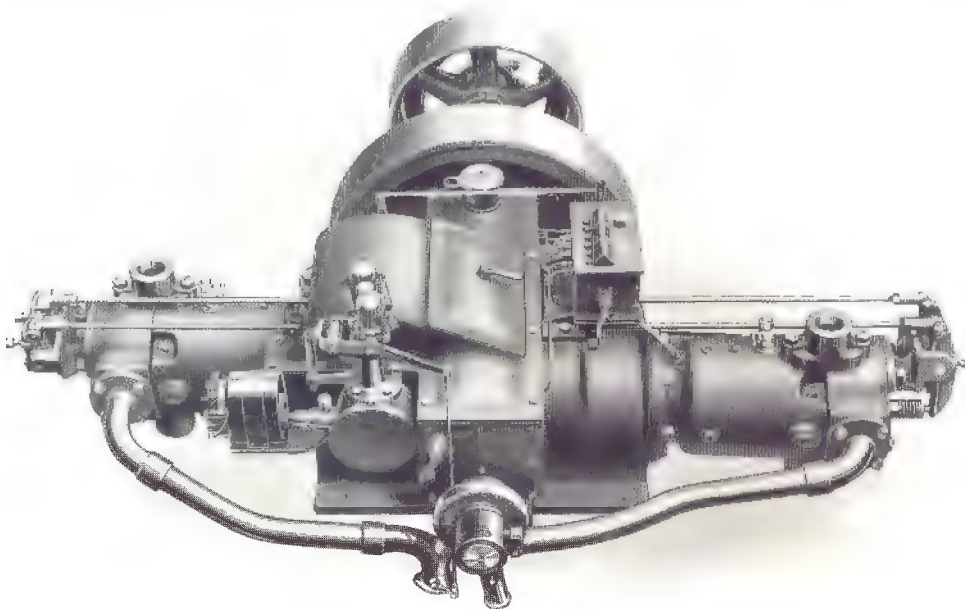
*The Front Axle Support and Pivot* are built directly into the frame, the support being a steel plate and the pivot a steel casting. Both are hot-riveted in place, giving a simple rigid support for the axle. This axle is of the automobile type, steered by knuckles located close to the hub, so that the wheels only turn; the axle itself does not move. It is built entirely of steel, so designed as to be very durable, but not heavy. The stubs of the front axle are machined and polished. The rear axle is made of steel, machined throughout and polished on bearing surfaces.

*The Power Plant* of this tractor is a two cylinder opposed engine 8 x 9. In describing this motor we are going to take up its vital parts piece by piece, to show you just exactly wherein Case construction is superior. As we said previously, one is apt to wonder why a cheap tractor is not just as good as a Case tractor. If you will read these pages we will show you that the construction consistent with Case policy demands no slighting of those parts which cannot be seen, but insists upon those refinements and accuracies which competent workmanship on the best material alone produces. It is just



Frame Showing Transmission





Top View of Motor of Case 40 Gas and Oil Tractor

these things that prolong the life of your tractor, and therefore increase its worth. It is the hidden values of all Case tractors that are important. It is just these things that you cannot see, but, which our word, backed by the experiences of thousands of satisfied customers, guarantees to you. They make all Case machinery unrivalled.

### *Crank Case*

The *Crank Case* is of grey iron, a one-piece casting so designed that the cover can be removed, giving access to the inside of the crank case without disturbing any other part. This is not true of all tractors. With the Case tractor access is had by the simple removal of a cast-iron cover placed within easy reach and on the top of the crank case. Its removal has nothing at all to do with the magneto or the timing gears, the disturbance of which in order to get inside the crank case, would be a serious matter. The crank case is bored in one setting, for the main bearings, cam shaft bearings and cylinders, reducing to a minimum, therefore, the possibility of disalignment.

### *Crank Shaft*

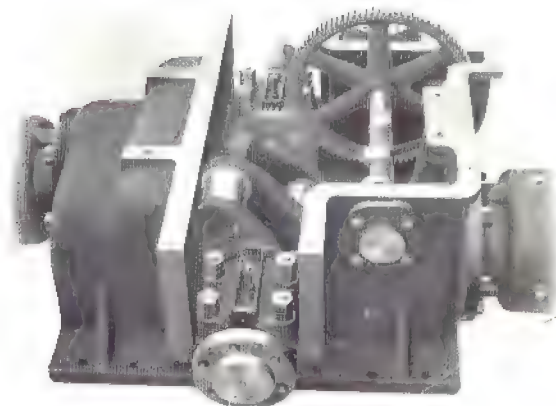
The *Crank Shaft* is drop forged, ground to the limit of 1-2000 of an inch. The flywheel flange is integral with the crank shaft. The shaft is fitted with oil rings for carrying oil to the crank pins. The oil is dripped into these rings and by the force of their revolution is propelled around the groove of the ring and into the holes which lead directly to the crank pin bearing. This insures very free lubrication of the pin and connecting rod. The oil is fed directly to the feed which drips into the ring by a tube from the mechanical oiler.

### *Bearing*

The *Crank Shaft* and *Crank Pins* are interchangeable and of the very highest grade of babbitt. The design is such that they can be renewed in a remarkably short time. It is not necessary to take the motor apart for this change, as is required in the majority of other makes. Simplicity in every department characterizes our machinery, and so with this tractor. You, of course, understand the importance of this feature. The bearings are fitted with ample grooves for oil. Bearings are machined all over and finally rolled by our own rolling department in order to make them fit with accuracy. This is another instance of the thoroughness of Case construction, as many manufacturers simply scrap their bearings which allows uneven wear, and therefore, play of the shaft.

### *Connecting Rods*

These are drop forged and accurately machined. The bearings in the wrist pin end are of high grade bronze, and in the crank pin end are of genuine nickel babbitt, backed with bronze. These bearings are interchangeable and rolled the same as the crank shaft bearings in order to secure the perfect setting of connecting rod. The bearing in the wrist pin end is finish reamed in the same operation as the rolling of the crank pin. This is done, as you will easily understand, to secure the perfect relationship and therefore absolute alinement and accuracy of the working parts. Again we call your attention to the fact that the rolling of the bearings and such other details commensurate with the high-grade workmanship and materials which go into Case tractors are what make them superior to other machines, which on the surface look just as good but whose life, and therefore whose value, cannot be mentioned in the same class with the Case product.



Crank Case with Cover Removed





## The Piston

The piston is of close-grained grey iron, rough-machined, allowed to stand for several days in order to relieve strains due to casting, after which time it is accurately machined for grooves, wrist pin holes and oil holes, and finally ground to size. This last operation takes care of any distortion which may have happened as a result of the second machining. The result is precision in the function of this part of the machine. The four rings of the piston are of grey iron with a lap joint. They are machined outside and inside after the joint is cut. They are then ground on sides and to the correct diameter of cylinder. The result of these operations is a perfect fitting on the cylinder walls, therefore perfect compression and maximum power. The piston pin in the piston is prevented from turning by a key and from moving lengthwise by a lock bolt provided with a metal lock. The pin is held at one end against any lengthwise movement prevents the springing of the piston by the pin should it become overheated. Had it been held at both ends there would have been no place to take up the expansion and the possibility of ruining the piston as the result of this action of heat, would have resulted.

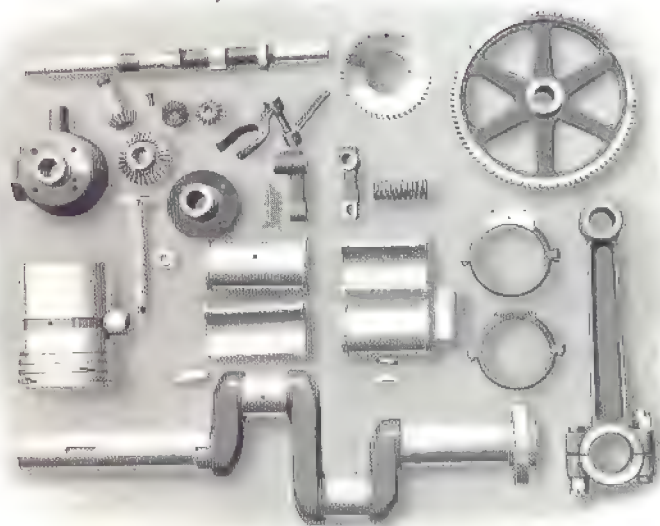
## Cam Shaft and Cams

The Cam Shaft and Cams are a one-piece drop forging. They are case-hardened, rough-machined, carbonized and ground to shape and size on a special machine for this purpose. The key seat for the cam gear is cut into the shaft with specific relation to a marked gear tooth. This marked gear tooth on the cam shaft gear fits into another tooth of the crank shaft cam gear, thus the cam shaft can be in only one position. What is the result? Should the motor be taken apart there is no danger of interfering with the timing arrangement.

## Cylinders

The Cylinders are of simple construction of grey iron with the heads cast separately, rough bored, allowed to age, and finish reamed to size. The cylinder, cylinder heads, valve seats and valve stems are thoroughly water jacketed. The cylinder and head are so designed that there is no

water opening leading into the joint between the cylinder and head, the water circulation from cylinder to head being accomplished by a specially shaped fitting with two openings, one for cylinder and the other for head. The connections are securely packed in order to prevent leakage. The valves are made with nickel steel heads fused onto carbon steel stems ground to accurate size.



Parts of Motor

## Governor

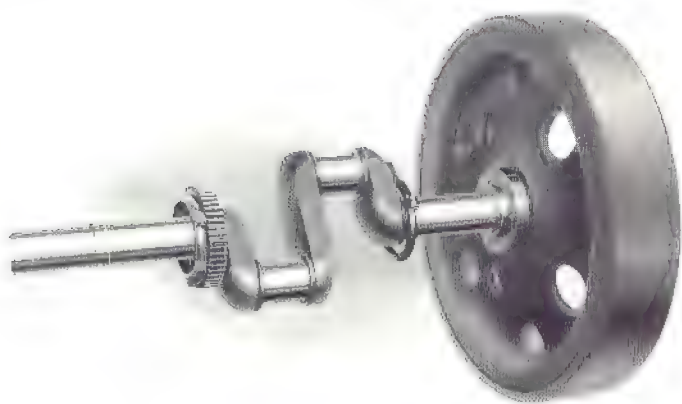
The Governor is of our own design and construction and is of the throttling type. This mechanism regulates the speed of the engine. The governor is simple in design and positively driven. The drive for it is contained in an oil-tight housing. The regulation, which is on the throttle principle, gives a power impulse every revolution whether the engine is operating with or without load.

## Transmission

The main driving pinions of the transmission are placed close to the bearings, doing away with any overhang. Therefore, the drive pinions on the crank shaft are supported not only by the engine bearing, but are provided with an extra outboard bearing. By this construction the overhanging strain on engine main bearing, due to the belt pull, is completely eliminated.

To change speed from two to three miles per hour, all that is necessary is the shifting of a lever. One of the main advantages of a two-speed tractor is lost if, to accomplish this result, considerable time has to be spent in removing clutches and drive pinions, as is necessary in some tractors.

The Differential Shaft has three bearings, two placed close to the differential gear, which prevents undue deflection and adds bearing surface at the point of greatest strain.



Crank Shaft with Flywheel



The *Transmission Shaft* is provided with a thrust collar which has an oil chamber provided for this collar in the shaft coupling. This collar eliminates all strain due to action of the bevel gears in the differential which tend to spread the channel members of the truck.

Both forward and reverse speeds are accomplished by means of one lever, which is interlocking. It, therefore, is impossible to throw the reverse pinion into mesh without first putting the two drive pinions in neutral position. The gears and the other parts of the transmission have been as carefully designed and constructed as those of the 25 described on page 34.

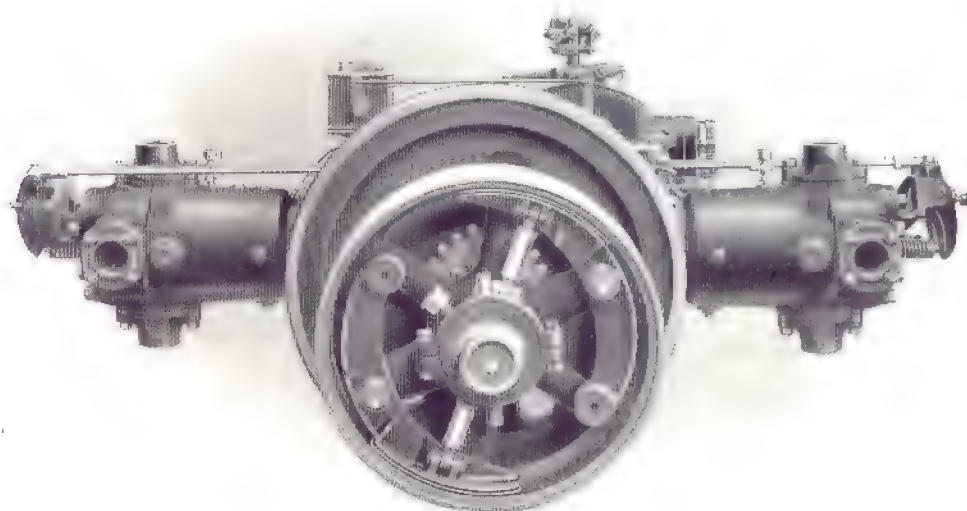
### *Lubrication*

The oiling system is force feed to different parts of the engine by a pump positively driven. The six feed oiler takes care of all important working parts. Those not so oiled are cared for by grease cup lubrication. The pump for this lubricating system is driven by an eccentric on the cam shaft. We want to call particular attention to our lubricating system in that it is very much more economical than the splash system frequently used, and guarantees the feeding to the lubricated parts of a perfectly clean, clear, lubricating fluid. The pump system, we believe, is by far the best sort of lubricating for tractors. The feeds for the different bearings are so located as to be seen at all times by the operator.

### *Cooling System*

The radiator used is of the very heaviest truck type with large lower and upper water tanks, the upper tank having sufficient water capacity to take care of water necessary when using lower grade fuels.

The radiator is of sufficient capacity, so that water will



Clutch Side of Motor

not boil under the worst possible operating conditions. Keeping the water down below boiling point will tend to prevent the formation of scale or other deposits in the radiator.

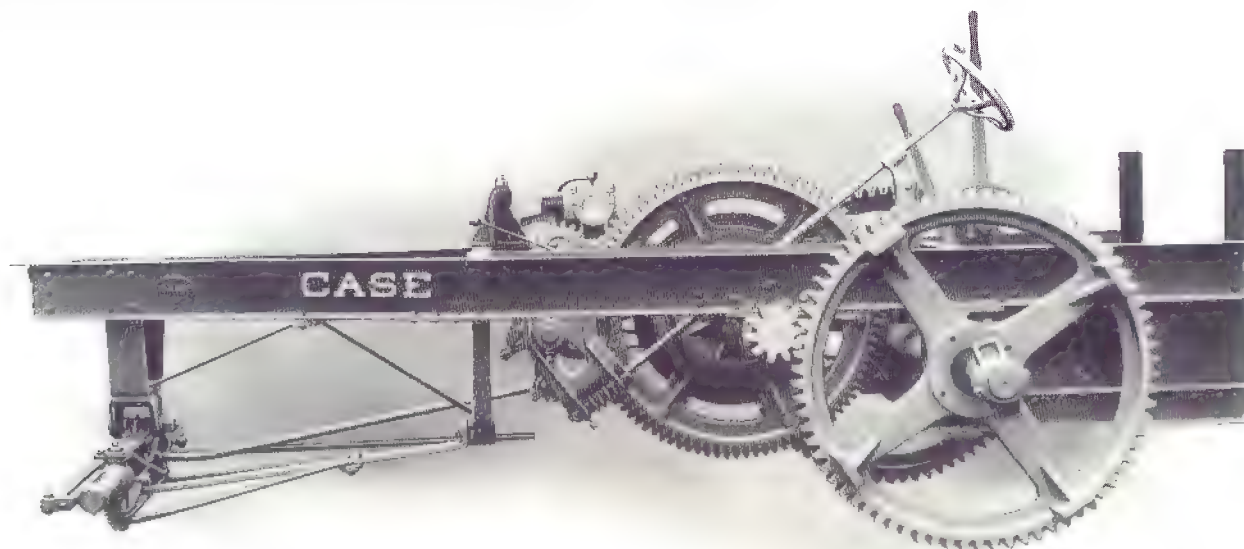
The draft for the radiator is supplied by a fan, this being operated by a friction wheel, making contact with the fly-wheel of motor.

The bearings for the fan drive are all of the Hyatt heavy duty type.

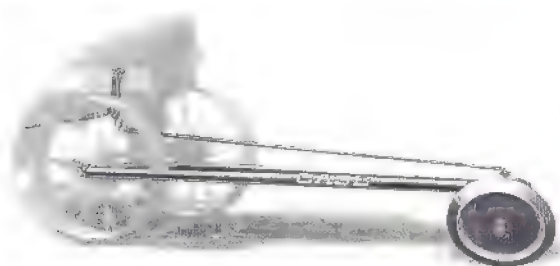
Circulation is thermo syphon, eliminating the use of water pump.

### *Ignition*

This is the high tension jump-spark system. The current for starting is supplied by a set of dry batteries, and after starting by means of a direct geared magneto. Magneto is covered with dust and rain-proof hood, and is easily accessible. This is characteristic of all parts of these tractors, as it is one of the essentials at which we have aimed the "get-at-ability" of all parts so far as is humanly possible.







Self Steering Device

### *Self Steering Device*

With this mechanism the operator can move about the tractor or plow as he pleases, while his work continues. All he has to do is to set the wheel of the Steering Device in the furrow, and he is then free to leave his seat for whatever work is necessary. It not only relieves the operator of the often tiresome work of hand steering, but does better work than the old way. It is quickly attachable or detachable to the tractor with no radical change.

### *Clutch*

The brake shoes in the clutch have very large bearing surfaces lined with asbestos brake lining, material with

high friction resistance and which will not wear or burn out readily should clutch be allowed to slip. The adjustment for wear on the clutch shoes can be taken up by turning a long right and left hand nut over the eye-bolts by which the shoes are operated. Connected to the same lever which operates clutch is a powerful brake which is applied directly to the outside of belt pulley. This can be used to stop immediately the rotation of pulley when used for belt work or when transmission gears are in mesh. It is of sufficient power to hold the tractor on the steepest incline.

### *Starting Device*

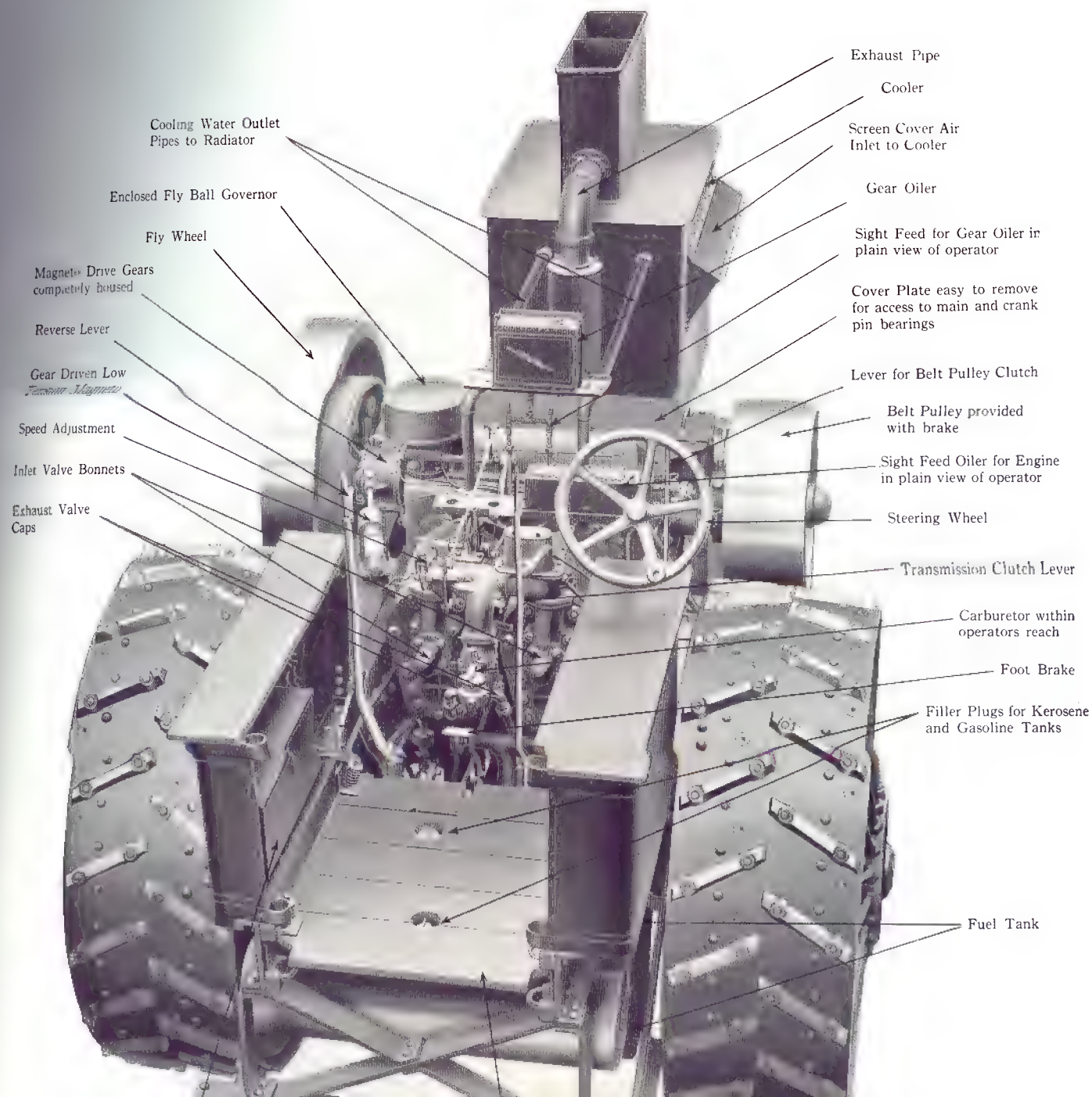
We want to call your attention to the cut on page 36 with particular reference to the safety starting device on this tractor. It is of our own special design, and makes the cranking of the engine over the center a very simple and easy matter. With this mechanism the danger to the operator, in case the engine fires before passing over the center, is eliminated.

This is but one of the many features which mark Case tractors as those built with close attention to the safety and convenience, therefore the efficiency, of the man who runs them.

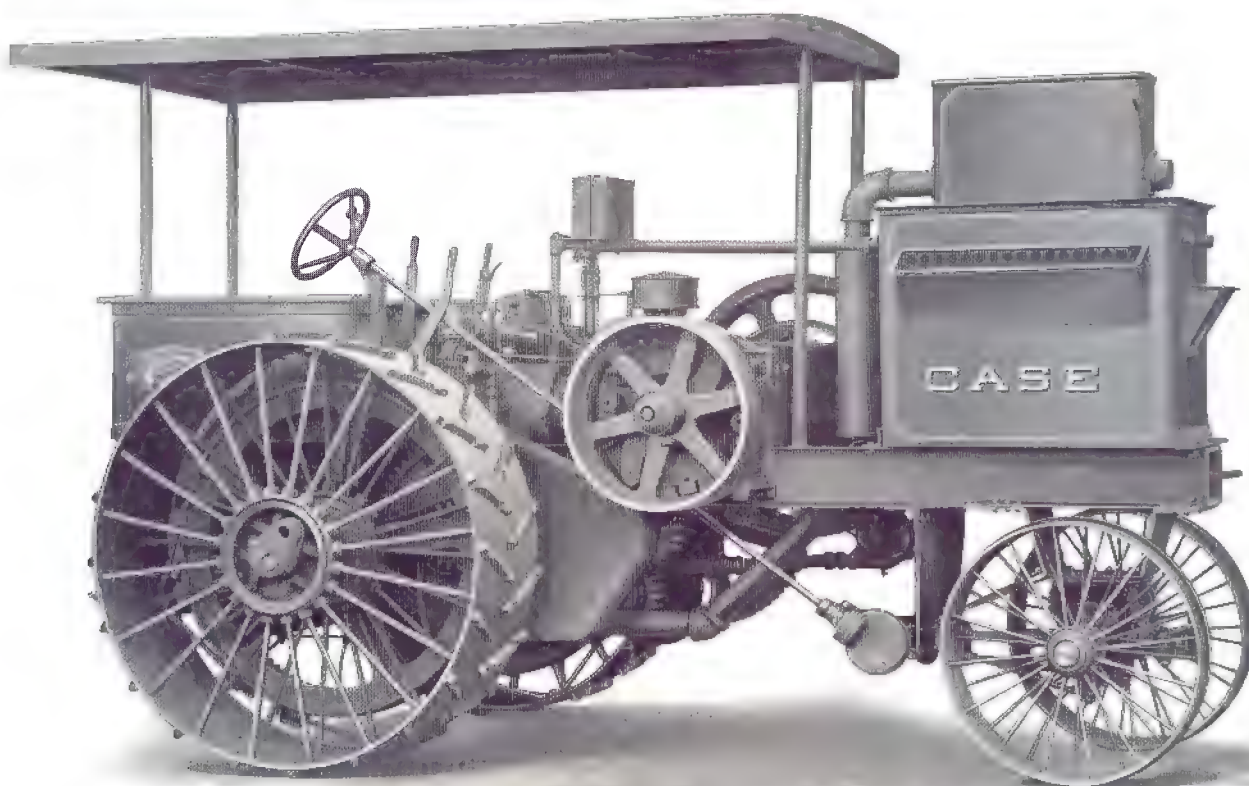


A View in One Corner of our New Mammoth Daylight Foundry. The men are getting their supply of hot iron from the big ladle, preparatory to filling the moulds. Every modern appliance to facilitate accurate work has been installed. Few concerns can boast of a foundry so complete and so modern as this new Case Foundry.









## *Case 30-60-Horsepower Gas and Oil Tractor*

**T**HIS is the largest sized Gas and Oil Tractor we build. Well designed and sturdily constructed, it bears out the principles that have made the Case reputation famous for over three generations.

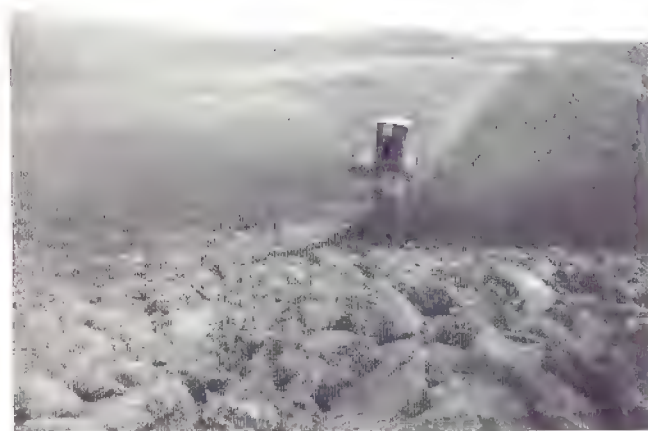
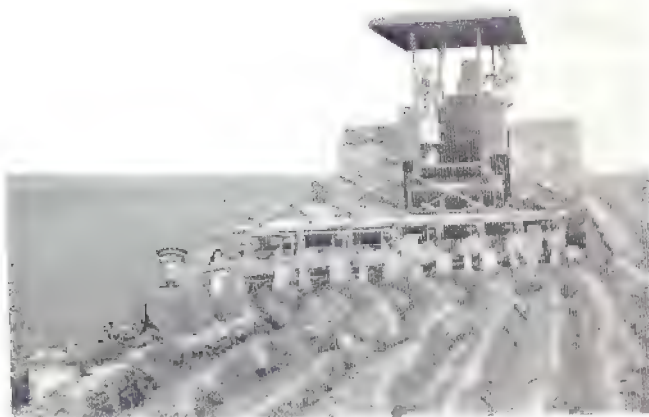
We have found in our many years of experience that the wise farmers insist on quality, rather than price. In making an investment on your farm you want a machine that will prove a wise buy — one that is judged by the efficient service it will render — one whose construction means long life. It is this type of tractor that produces bigger profits and gives greater satisfaction. Case Tractors

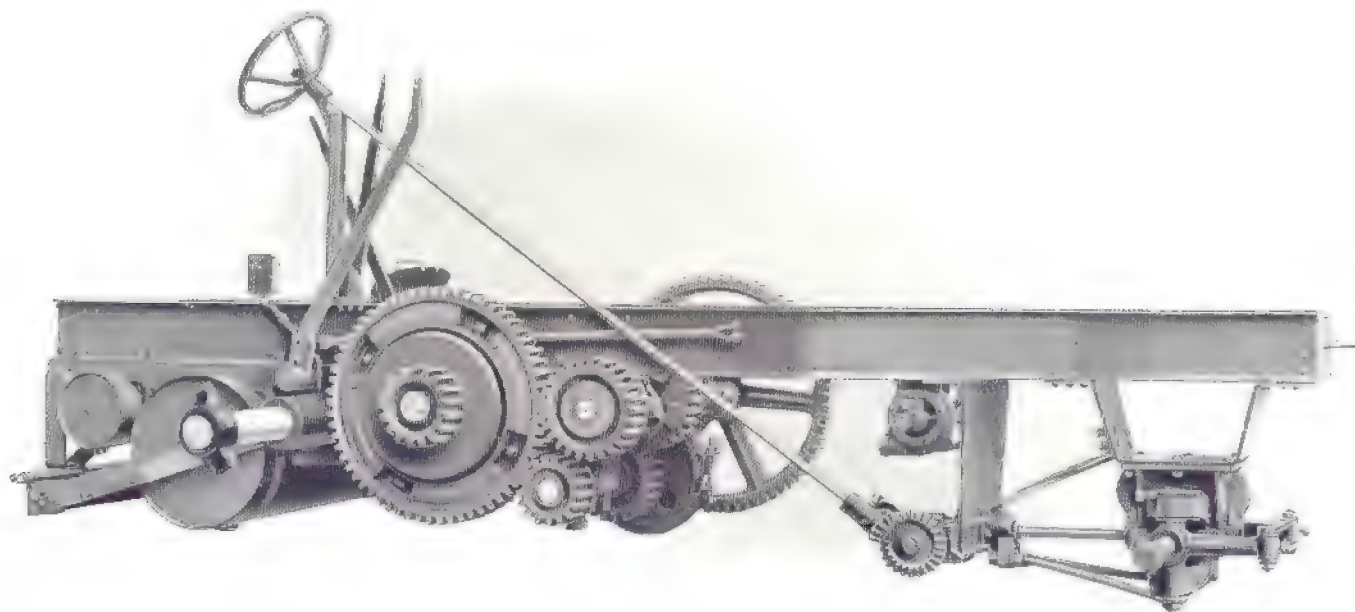
have been built to satisfy the demand for efficient tractors. In this respect no tractors of their sizes enjoy wider popularity. Case tractors may seem to cost a trifle more than many makes, but when they are measured by their efficiency and long life there can be no more economical or safer investment.

This tractor represents in every detail the supreme work of the designer, together with the finest materials and workmanship that a good tractor requires.

Price complete, as shown above, \$2500.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

*Prices quoted on pages 91 and 92*





## Construction

### Frame

*The Frame* of this tractor is of steel channels 10 inches deep, hot riveted. It is carefully designed and constructed, with reference to those twisting and distorting strains, as well as to the carrying loads necessary in a tractor which has to travel the not-always-smooth country roads.

### Motor

*The Motor* is a two-cylinder horizontal, four-cycle type with cranks set 360 degrees apart, so that a power impulse is received every revolution. The cranks are counterbalanced by weights on the crank cheeks. The cylinders are 10-inch bore by 12-inch stroke. The normal speed is 365 revolutions per minute. It is rated at 60-horsepower with a maximum of 75.

### Crank Case

*The Crank Case* is designed to be placed low on the truck to prevent vibration. It is held in place by turned bolts which fit into reamed holes. All main bearings are easy of access, due to the design of a cover top which is easily removed in order to give access to the inside of the crank case. Main crank shaft bearings are of the shell type, fitted into bored recesses in crank case. This construction allows renewal without having to remove the crank shaft. The crank case further is provided with bearings for cam shafts which, too, are easy to get at. This feature is very important, we believe, as we know of some tractors where the valve setting has to be disarranged and the magneto removed in order to get inside the crank case. It is absolutely impossible for dust or grit to get inside of our crank case. This precaution prevents the cutting of the bearings by this outside material. The crank case is bored to receive the cylinders and the cylinders are turned to fit, so that after once bolting in place there is no chance to get out of alinement. *The Crank Shaft* is of .35 carbon steel which is forged from a single billet and is machined all over. It has three



way for them to shift, and when once correctly set, they cannot get out of position. Rocker arms for operating the exhaust valves are journaled to the crank case. All bearings are provided with removable bronze bushings, hardened steel rollers and pins working against hardened surfaces. The phosphor bronze gear which operates the governor is located on the cam shaft. One end of cam shaft is provided with an eccentric which operates the fuel pumps and multiple sight-feed lubricating pump for all main engine bearings and cylinders. The other end is provided with a mitre gear for operating the magneto.

*The Connecting Rods* are drop forged of I-section and carefully heat treated.

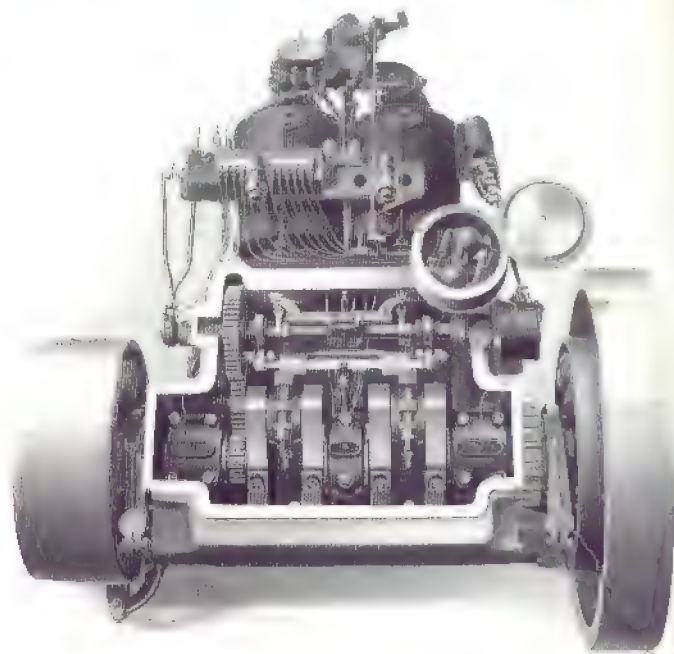
*Cylinders.* The cylinders used on this tractor are made of a special mixture of close-grained grey iron with heads cast separately. The cylinders are first rough bored, then allowed to age, after which they are finish-reamed to exact size. The cylinders, cylinder heads, and valve seats are thoroughly water jacketed.

The cylinders are designed separately from the heads, with water jacket running through cylinder and head. A special gasket of long fibered asbestos fits between the two, making an absolutely water-tight joint.

### *The Pistons*

*The Pistons* are of close-grained grey iron, rough machined and then allowed to rest for several days in order to relieve any casting strains. After this time they are taken and accurately machined for grooves, wrist pin holes and oil holes. Finally they are ground to precision of size. Each piston is provided with four rings which are of grey iron with lapped joints. They are machined outside and in, and after the joint is cut they are then ground to a correct diameter for the cylinder. The accuracy with which these operations are executed results in perfect compression, which in turn gives maximum power with a minimum consumption of fuel.

The piston pin is prevented from turning by a key and from moving lengthwise by a lock bolt provided with a



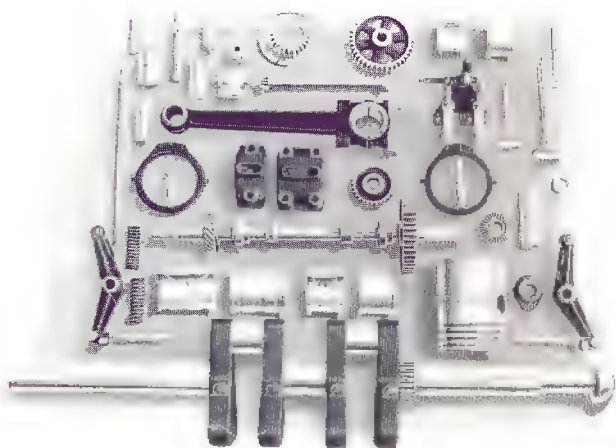
Motor with Crank Case Cover Removed

lock nut. The pin being thus held at one end against any lengthwise movement prevents the springing of the piston by the pin should this latter member become overheated and therefore expand. Had it been held at both ends there would have been no place for the expansion to be taken up, and damage would very likely have resulted.

### *The Clutch*

Of this tractor is provided with brake shoes which have unusually large bearing surfaces. They are fitted with maple shoes which are lasting and may be replaced at little cost. The adjustment for wear on the clutch shoes can be taken up by turning a long right and left hand nut over the eyebolts by which the clutch is operated. Connected to the same lever which operates the clutch is a powerful brake which is applied directly to the outside of the belt pulley. By the operation of this member, rotation of the pulley, when used for belt work can be stopped immediately.

*Transmission.* The transmission is by means of straight spur gears. The pinion on the crank shaft and gear on first transmission shaft are made of semi-steel and cut. All other gearing is also of our famous ferro-steel mixture. Note further that the transmission shafts are not simply held by separate bearings secured by rivets direct to the channels, but by a cast iron housing containing all bearings. This construction prevents any possibility of the shafts getting out of line. This is a valuable feature, as next to the motor there is nothing so important as the transmission, and the main feature of the transmission is the alinement of its shafts. Cannon bearing for rear axle is machined and fits into a saddle pad which is a part of the transmission housing. By this rear axle bearing construction, stiffness is added to the entire frame.



Motor Parts

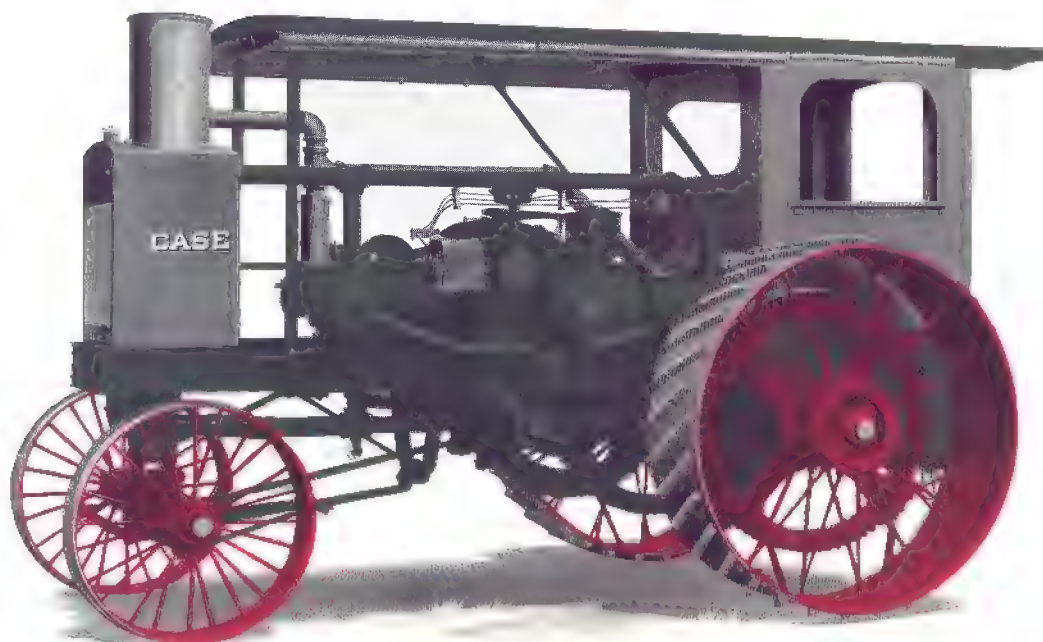


Case 10-20 Gas Tractor

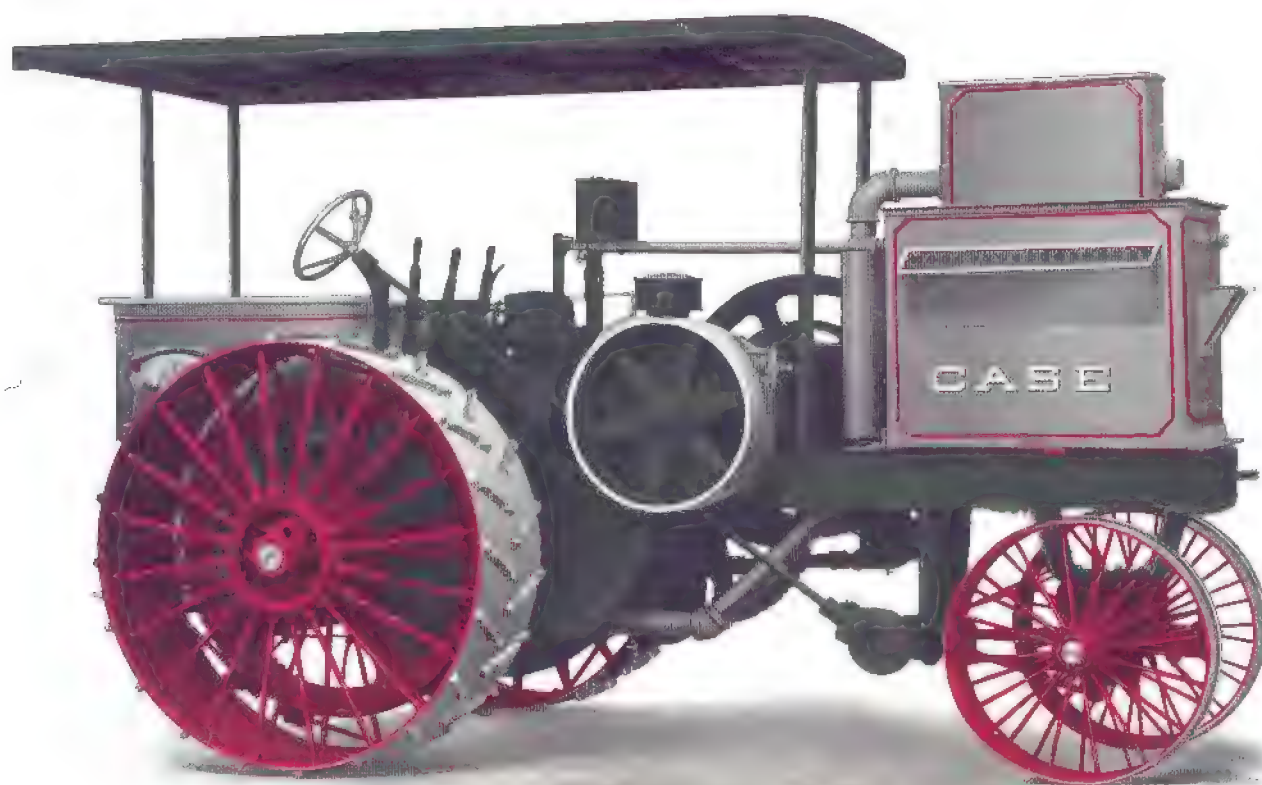


Case 12-25 Gas Tractor

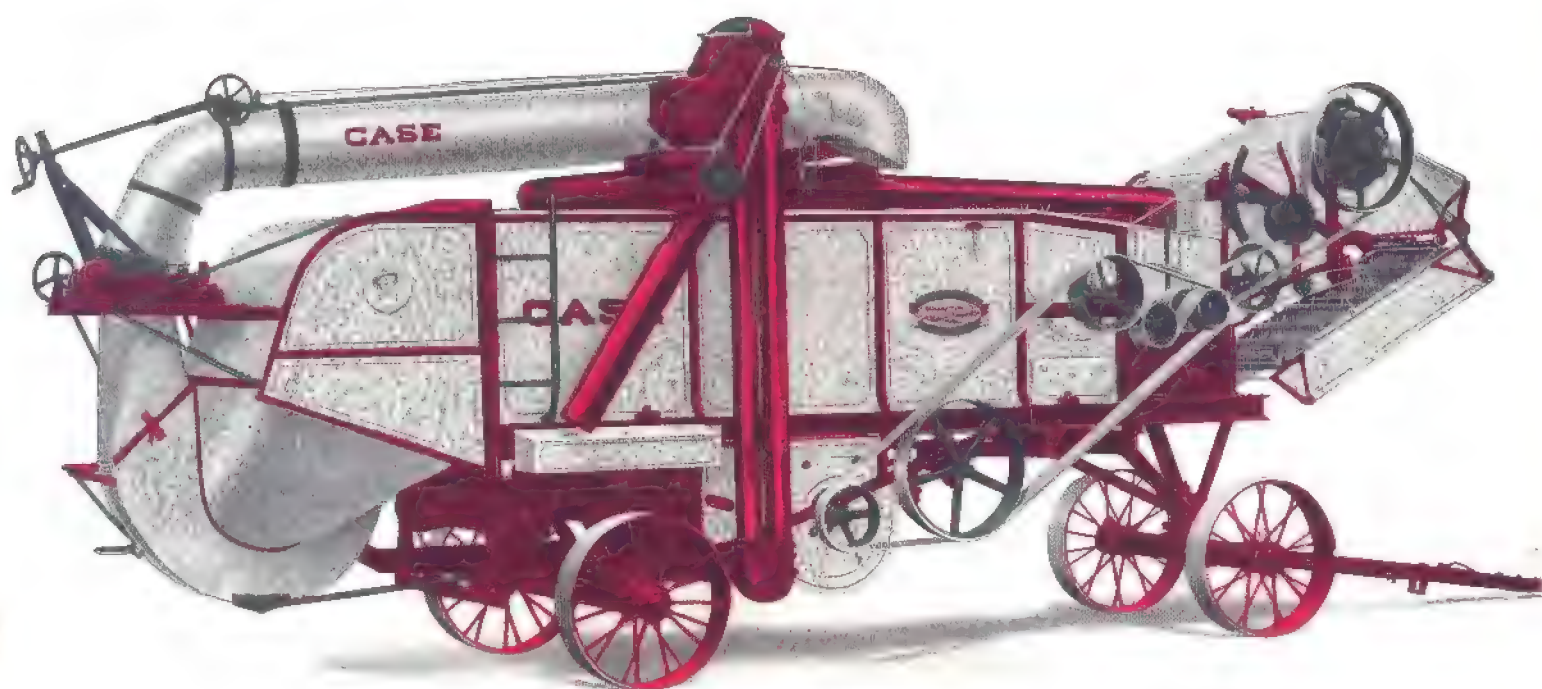




Case 20-40 Gas and Oil Tractor



Case 30-60 Gas and Oil Tractor



Case Steel Threshing Machine



Case Steam Tractor



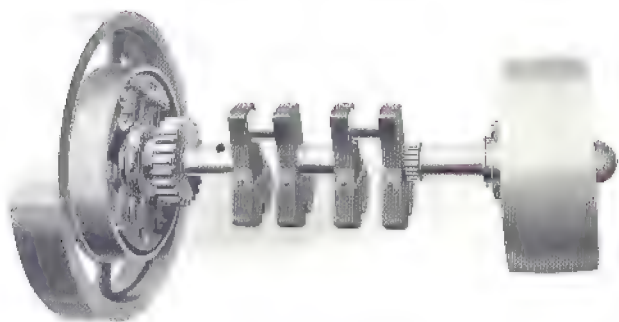


Case Grader



3-2-Bottom Light Tractor Gang Plow

*Differential Gear* is of the spring-mounted type, the same as on our steam engines. This prevents any injury due to sudden shocks on the gearing, as the spring takes up all suddenly applied loads.



Clutch on Crank Shaft

*Ignition.* The ignition is of make-and-break type, batteries used only for starting. A magneto which has proven especially satisfactory in the larger tractors is used, being located with due regard to the accessibility of the operator. It is protected by a rain and dust proof leather hood. A lever and quadrant are provided for changing the point of ignition for starting, and also can be set at the best point during the operation of the engine.

*Carburetor.* As Case tractors are shipped to all parts of this and to foreign countries, it is to be expected that there will be a wide variation in the grade of fuel available. In order to meet this situation we have been particular to use a carburetor so simple that it can be understood by the average operator and one that will use, successfully and economically, without change, the various grades of gasoline, naphtha, distillate and kerosene. With the lower grades of fuel it is necessary to spray water with the charge. This is taken care of automatically, the amount being dependent on the load.

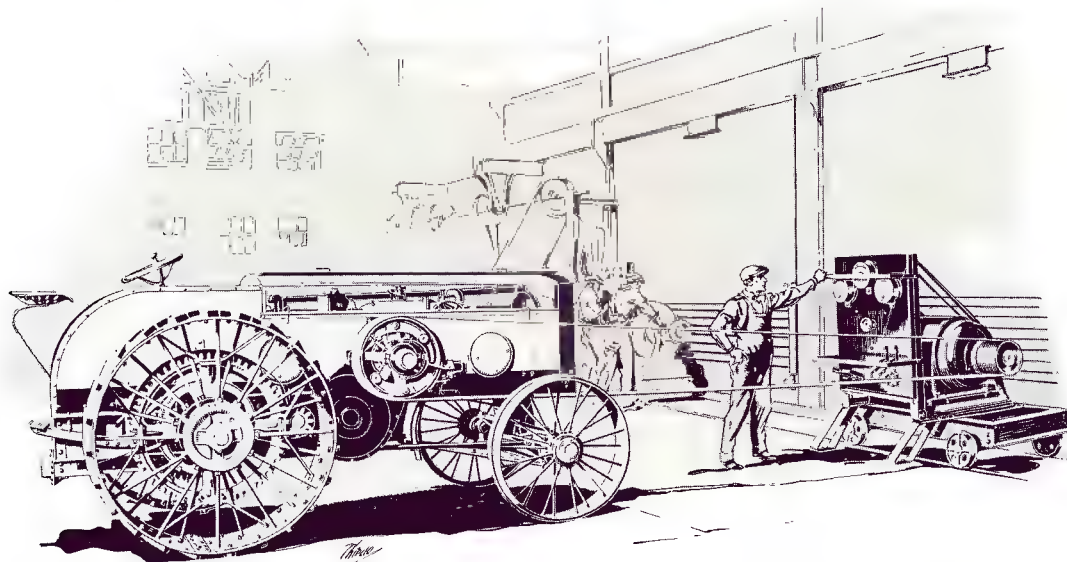
*Governor.* The governor is driven from the cam shaft by spiral gearing. The whole mechanism is completely

enclosed so that there is no possibility of dust accumulating, and as a result interference with its operation. The speed of the engine is controlled on the throttling principle. A hand adjustment is provided so that the speed can be changed through a wide variation.

*Lubrication.* The entire motor is taken care of by a 12 feed oil pump. It is located so that the operator can at all times see the amount of oil fed to the bearings. The oil, after passing through the main shaft and cam shaft bearings, is led through three separate channels to the oil rings on the crank shaft. By this method should one oil feed become clogged there is left more than ample means of oiling. The waste oil from the crank case is carried by pipes to lubricate the master gears and pinions. A separate gravity oil tank with sight feeds for oil used on the other transmission gears is provided. Bearings for transmission shafts and all parts which cannot be reached by the mechanical oiler are provided with compression grease cups located with particular reference to their accessibility.

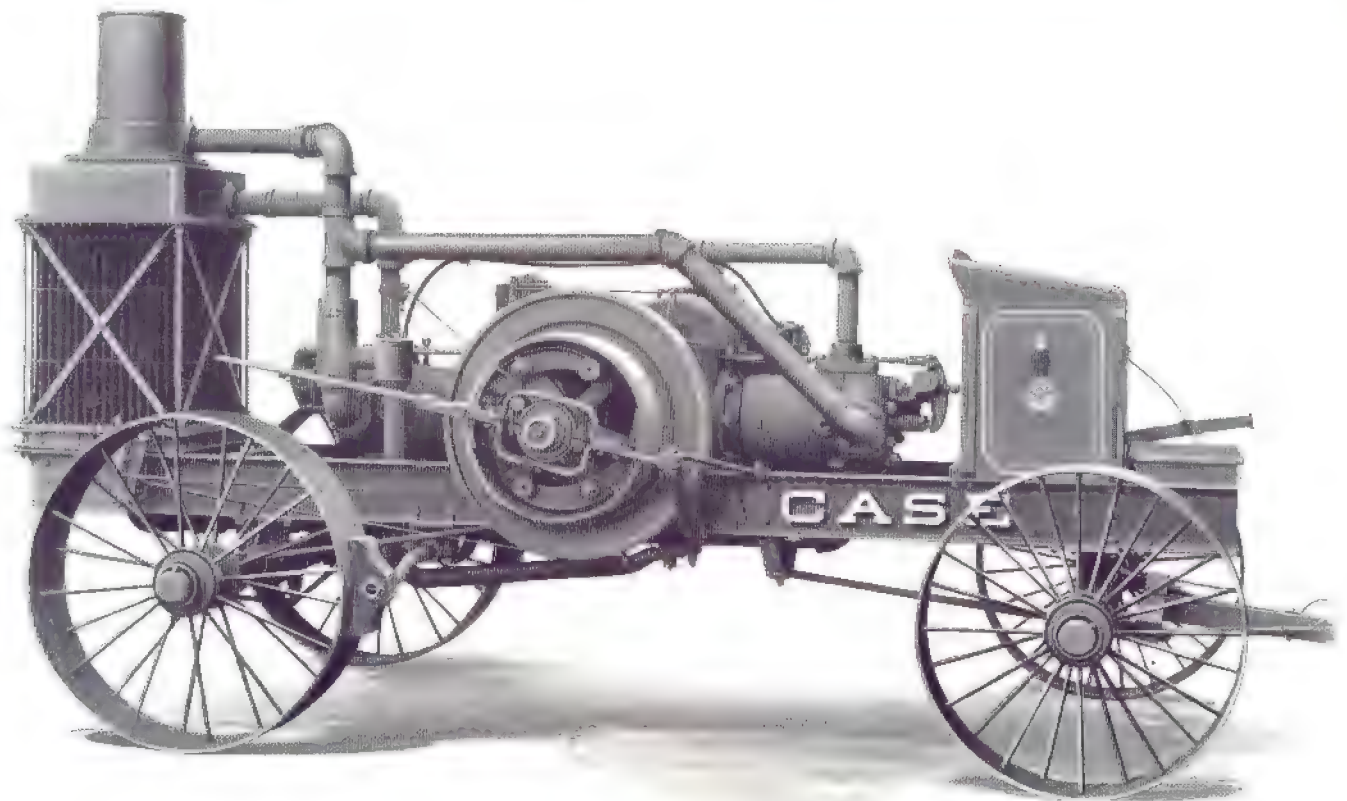
*Cooling System.* Water is used as a cooling medium. The radiator is designed without fan, as the necessary draught is created by using the force of the exhaust gases in the same way as is done on the 40. The radiator is easily taken apart for cleaning, a worthy feature in those localities where the water used in the tractor is dirty or of strong alkali deposit. The water is circulated by a belt driven centrifugal pump through the cooling system. The pump is located at the lowest point in the water circulating system, and designed with one valve which will drain the entire system.

The reverse on this tractor is accomplished by a sliding gear mounted on a square shaft. This design eliminates the use of keys. The foot operated brake on the transmission allows engine to be held on any steep incline and is so designed to hold engine in place for belt, as a lock is provided for this purpose.



View showing Case 12-25 Gas Tractor being tested by means of an electric generator. The operator is shown in the act of reading the electrical instruments by means of which the horsepower is accurately determined. Every Case Tractor, before being shipped, is required to develop horsepower in excess of its rating





## *Case Portable Gas and Oil Engines*

**T**HE use of the Case Gas and Oil Portable Engine is becoming more widespread each year. They answer the purpose of a variety of farm power requirements. They are finding favor with the farmer who wants to be independent, as far as his power needs are concerned.

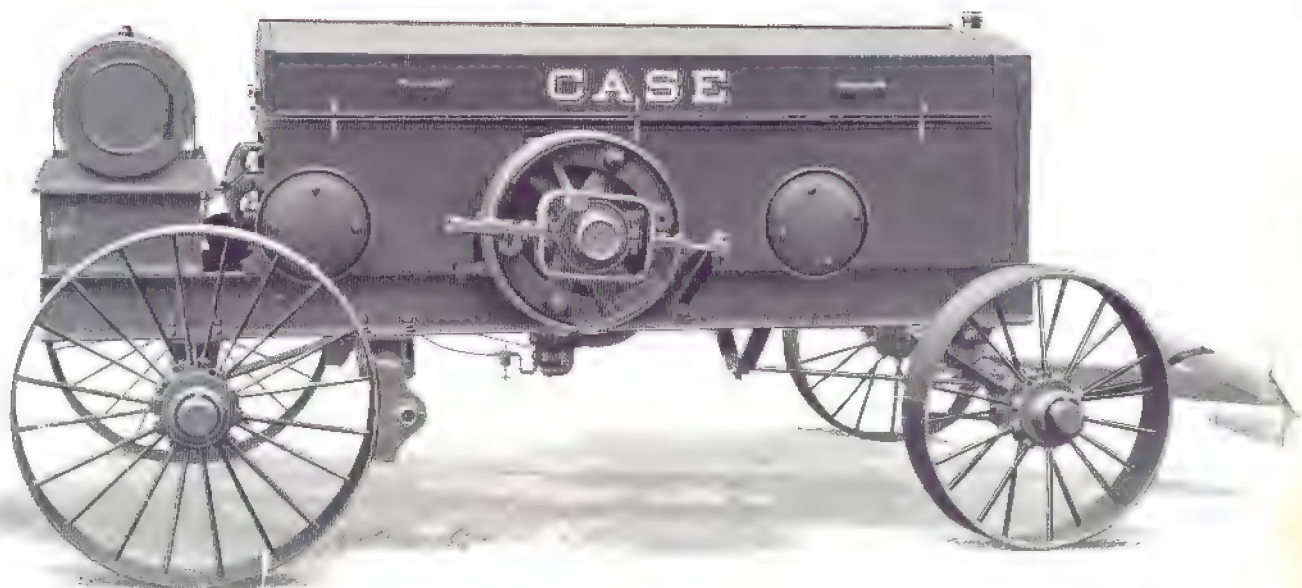
To give the farmer unfailing service season after season has been our aim in offering these portables to the busy farmer. They are sturdily constructed, with the same motors as are built into our Gas and Oil Tractors. This fact alone is significant in itself. The details of the

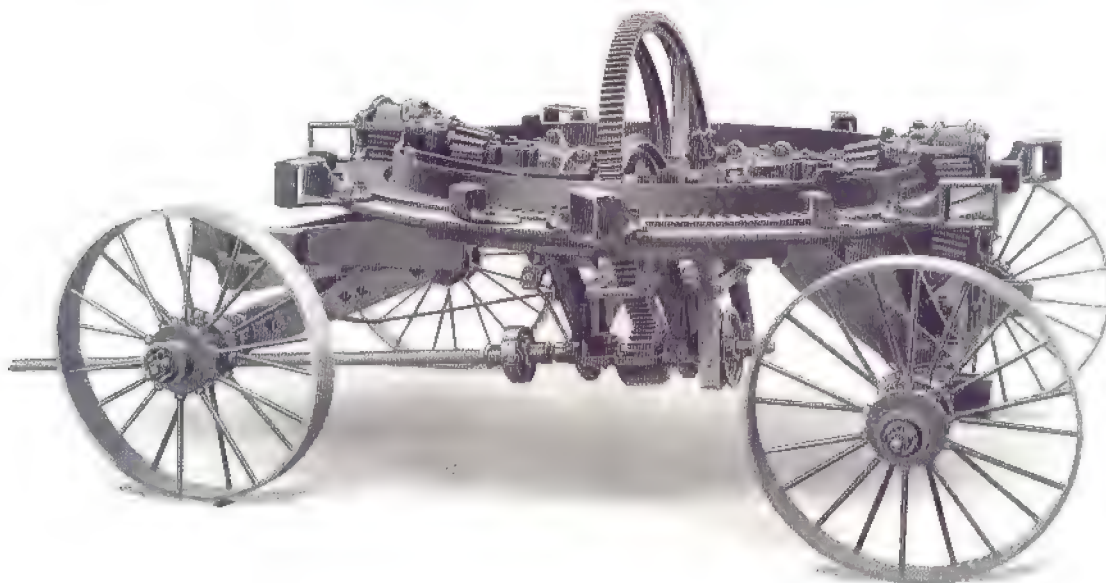
design and construction of these motors are listed and described on pages 31 to 41.

Case Gas and Oil Portable come in two sizes — 12-25 and 20-40. Farmers who feel the need of a machine of this type will find no safer nor wiser investment.

Price, 12-25 Portable Gas Engine for gasoline only, \$800.00; 20-40 Portable Gas Engine, \$1100.00. In ordering the 20-40 specify whether gasoline or oil is to be used. These prices are F. O. B. Racine, Wisconsin. Ten percent discount for cash.

*Prices quoted on pages 91 and 92*





## *Case Dingee-Woodbury Sweep Horsepower*

EVERY old thresherman knows the Case Dingee-Woodbury Sweep Horsepower, and they know that for power, lightness of draft, and durability it surpasses all others. Years ago, before steam was used for threshing, the Dingee-Woodbury was practically the only successful horsepower, which enviable position it still holds.

Side strains and drawing over of the bull-wheel is prevented by double bull pinions.

The spur-wheel shaft at the center is supported by an adjustable babbitted box, which holds the shaft in perfect alinement, and permits of wear being taken up quickly when necessary.

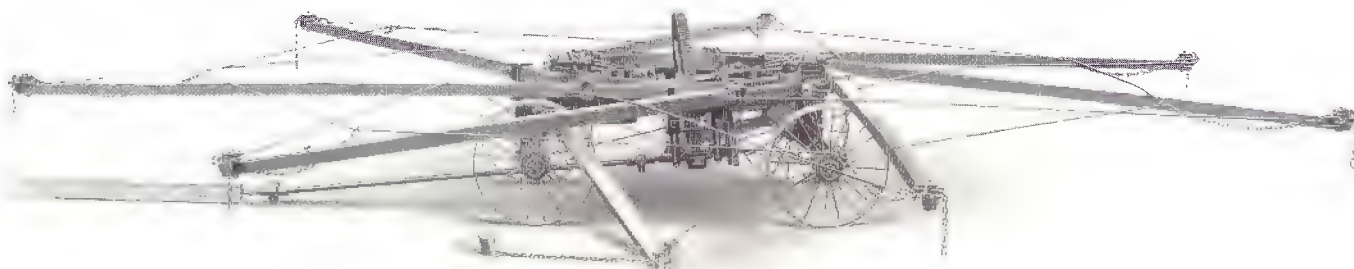
The equalizer sheaves fit the chains perfectly, thus preventing undue wear and adding to the durability of both chain and sheave.

The frame is metal. The truck wheels are of steel, with four-inch tires. The wooden platform which covers the gearing does not revolve.

The sweeps of the 12-horsepower and smaller sizes are 12 feet 7 inches long. Their ends move in a circle the circumference of which is 79 feet. The sweeps of the 14-horsepower size are 14 feet long, with their ends moving in a circle with a circumference of 89 feet.

Horses ordinarily travel around the 79-foot circle two-and-a-half times a minute, and around the 89-foot circle two-and-a-quarter times a minute, in either case covering about two-and-a-quarter miles per hour. The use of a 16-cog pinion, which gives 101 revolutions of the tumbling-rod to one round of the horses, in most cases will give proper cylinder speed to a Case Threshing Machine.

*Prices quoted on pages 91 and 92*



Horsepower with Sweeps in Position





## Case Steel Threshing Machines

**Y**OUR separator must, of course, get for you every possible bit of grain, and must do it with as little power, required of the engine, as possible. Your machine must further be solid and steady in action, with as few belts and other moving parts as can be used, because every moving part means more power and complicated care. But remember, too, that it must be fire-proof. In short, it must be a Case Steel Threshing Machine. Have you or your neighbors ever had a fire in your machine? Maybe not, but that's poor insurance. Think of the thousands of dollars that go up in smoke each year in wooden machines. Many fires that might have

been stopped, found welcome fuel in these wooden machines, and soon the threshed grain, the stacks, the machine, the barn, and the stock were things of the past. This is not an extreme picture. We can point out many such cases. But to a Case indestructible Threshing Machine fires, cyclones, ditches, have no terror. Your investment is safe, and year after year keeps on producing profitable results for you, delivering into the sacks the maximum grain at the least cost. This is why three Case Steel Machines are sold to one of other makes. Just bear these points in mind. They will save your grain, and make you money.



# 36-Inch Belt Steel Threshing Machine

*18 x 22-inch Cylinder, Hand-feed Attachment and 16-foot Folding Stacker*

THIS general-purpose machine is the smallest we manufacture. This 18 x 36 has long satisfied an urgent need. The farmers have taken a real liking to it for it does excellent work.

One of our friends from Texas wrote us recently of a rather unusual incident that occurred in his vicinity.

He said:

"We want to tell you of a little experience we had with our little Case 18 x 36-inch separator

"On July 4th, 1915, our territory was visited by a terrific cloud-burst that put all the little streams up higher than was ever

known, overflowing all bottom farms. On one job in particular we were called on to go into a crop that had been overflowed and was digging the wheat out of drifts. They had a ——— outfit there and could do nothing with it, but knowing our Case machine would do the work, we had no hesitancy in going in. And we did the job to everybody's satisfaction.

"When a Case will not do the work, the other fellow better stay away. We make friends for ourselves and the Case company every day we run."

This machine is a typical Case product.

Price complete, as shown below, \$440.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

## Specifications

CONSTRUCTION — Frame of structural steel; sides galvanized sheet steel.

CYLINDER — Length, 18 inches; diameter, 22 inches; speed, 1,075 revolutions per minute; 12 double bars; 51 Sandow steel teeth with tempered blades and annealed shanks, which are interchangeable with concave teeth.

POWER — Geared for horsepower or belted for engine. Regular pulley 8 $\frac{1}{4}$ -inch diameter, 8-inch face. We have several other sizes, any one of which will be substituted when specified in order.

FEEDER or Hand-Feed Attachment as ordered. Special Feeder for headed grain, "Spokane No. 9."

STACKER — Case Gearless Wind and Attached Stacker for belt

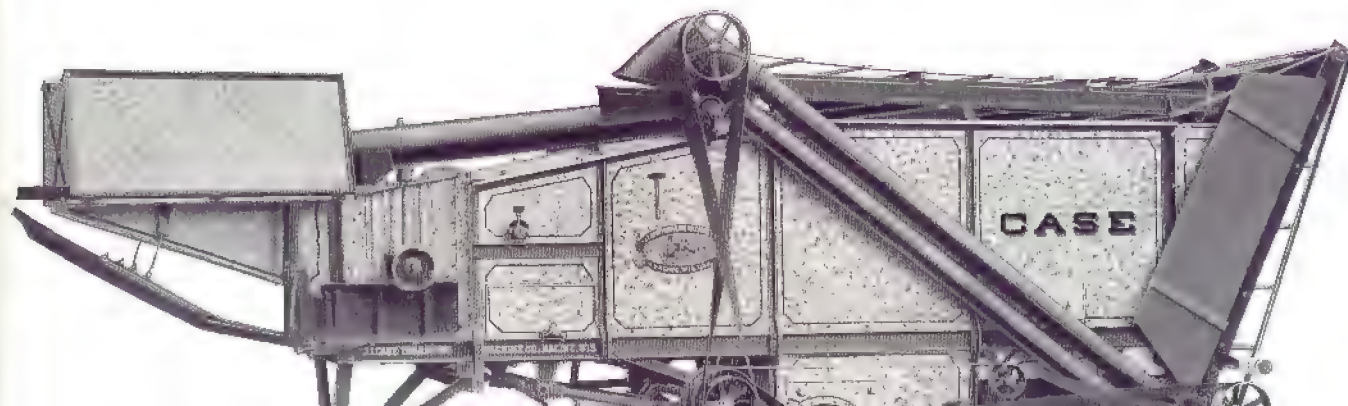
machine, 16- or 24-foot Common Stacker for either geared or belt machine.

GRAIN HANDLER — Either our No. 1 Automatic Register, Nos. 3 or 4 Bagger. No. 6 Loader or the Tally-Box and Register are suitable for this machine. The No. 2 Automatic Register or No. 5 Loader can be, but are seldom, used on this machine.

TRUCKS — Wheels, 30 inches in diameter, 4-inch tires; steel spokes and rims, steel axles, 10-inch skeins; tongue, neck-yoke, and whiffletrees. Brake furnished on special order at extra price.

EXTRA ATTACHMENTS — Furnished on special order at extra price: Clover, Pea, Bean or Peanut, also Recleaner. The Rice Equipment is regular for rice threshing.

*Prices quoted on pages 91 and 92*







# 42-Inch Steel Threshing Machine

24 x 22-Inch Cylinder, Feeder, 18-Foot Folding Stacker, No. 4  
Bagger and Brake

**T**HIS size of machine has found strong favor in localities where good threshing prevails. One of the users of this separator wrote us recently, saying: "I have used many makes of separators, but my Case 24 x 42 threshes wheat, rye, oats, barley, clover seed, timothy, brown grass, orchard, and other seeds, better than any machine I have ever used.

"The Case has made my reputation as a thresher."

Seventy-four years of experience means something to the farmer who wants the best. Don't forget the Case fire-proof construction.

Price without brake, \$620.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

## Specifications

**CONSTRUCTION** — Frame of structural steel; sides galvanized sheet steel.

**CYLINDER** — Length, 24 inches; diameter, 22 inches; speed, 1,075 revolutions per minute; 12 double bars, filled with 69 Sandow steel teeth with tempered blades and annealed shanks, which are interchangeable with concave teeth.

**POWER** — Geared for horsepower or belted for engine. Regular pulley 8¼-inch diameter, 8-inch face. We have several other sizes, any one of which will be substituted when specified in order.

**FEEDER or Hand-Feed Attachment** — Either will prove satisfactory on this size Separator. Special for headed grain, "Spokane Nos. 8 and 9."

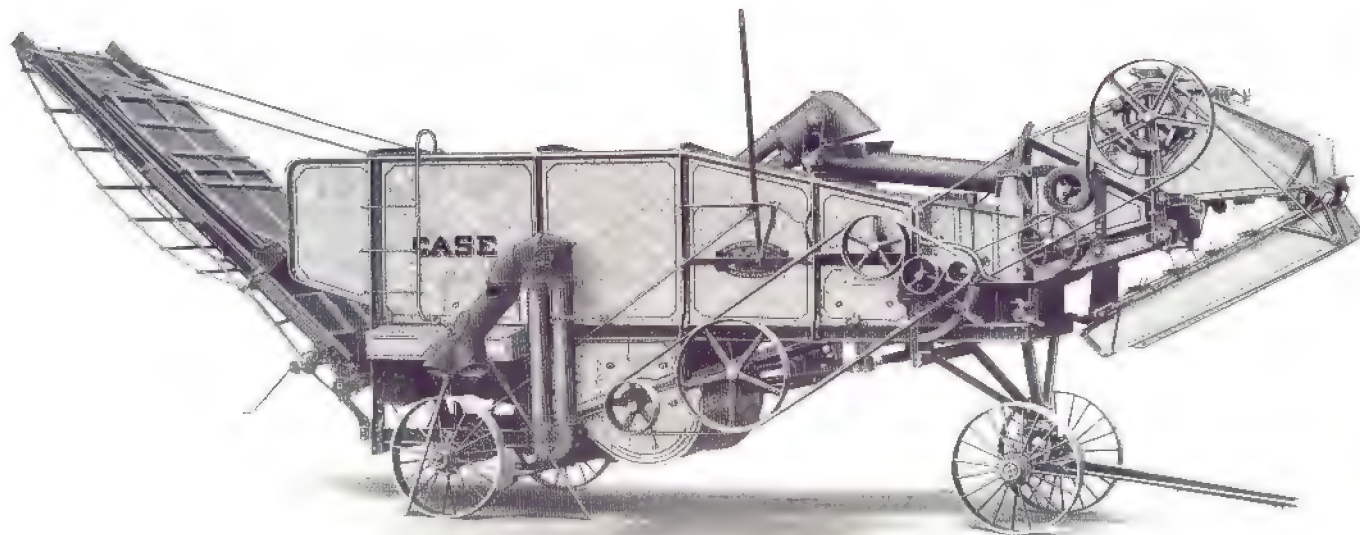
**STACKER** — Case Gearless Wind, the 18- or 24-foot Common or the Attached Stacker can be used.

**GRAIN HANDLER** — Our Low Loader No. 6 or the Nos. 1 and 2 Automatic Registers, or No. 4 Bagger makes a good grain attachment for this machine. Any of the other styles can also be used.

**TRUCKS** — Wheels, 30 inches in diameter; 6-inch steel tires; 4-inch tires furnished on special order at same price; steel spokes, steel axles, 10-inch skeins; spliced tongue, neckyoke and whiffletrees. Brake furnished on special order at extra price.

**EXTRA ATTACHMENTS** — Furnished on special order at extra price: Clover, Pea or Bean and Recleaner. The Rice Equipment is furnished regularly for rice threshing.

*Prices quoted on pages 91 and 92*





# 50-Inch Steel Threshing Machine

28 x 32-Inch Cylinder, Case-Sattley Attached Stacker, Feeder, and No. 6 Bagger

THE qualities of Case Threshing Machines are best expressed by an Iowa farmer who has a Case machine that has been in continuous service for the last thirty years and which is still running. He says regarding it: "If there is a better machine in the state that has a better record <sup>w</sup> would like to hear of it. And if there is a better separator made than Case, I have never found it. I would like to say to parties thinking of buying a threshing machine that if you want a machine with the longest life, and one that will thresh clean and save all kinds of

grain with the least possible expense, one that is simple and durable, buy a Case." We'll gladly furnish his name on request.

This 28 x 50 is for the farmer who wants a good machine of popular size, one that will increase his profits by producing bigger results.

Price complete, as shown below, \$900.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

## Specifications

CONSTRUCTION — Frame of structural steel; sides galvanized sheet steel.

CYLINDER — Length, 28 inches; diameter, 32 inches; speed, 750 revolutions per minute; 20 double bars; 135 Sandow steel teeth with tempered blades and annealed shanks, which are interchangeable with concave teeth.

POWER — Built as belt machine, to be run by an engine. Regular pulley 13¼-inch diameter, 9¼-inch face. We have several other sizes, any one of which will be substituted when specified in order.

FEEDER or Hand Feed Attachment furnished. We recommend the self-feeder for best results. Special for headed grain, "Spokane Feeder Nos. 8 and 9."

STACKER — The Case Gearless Wind or Attached Stacker will

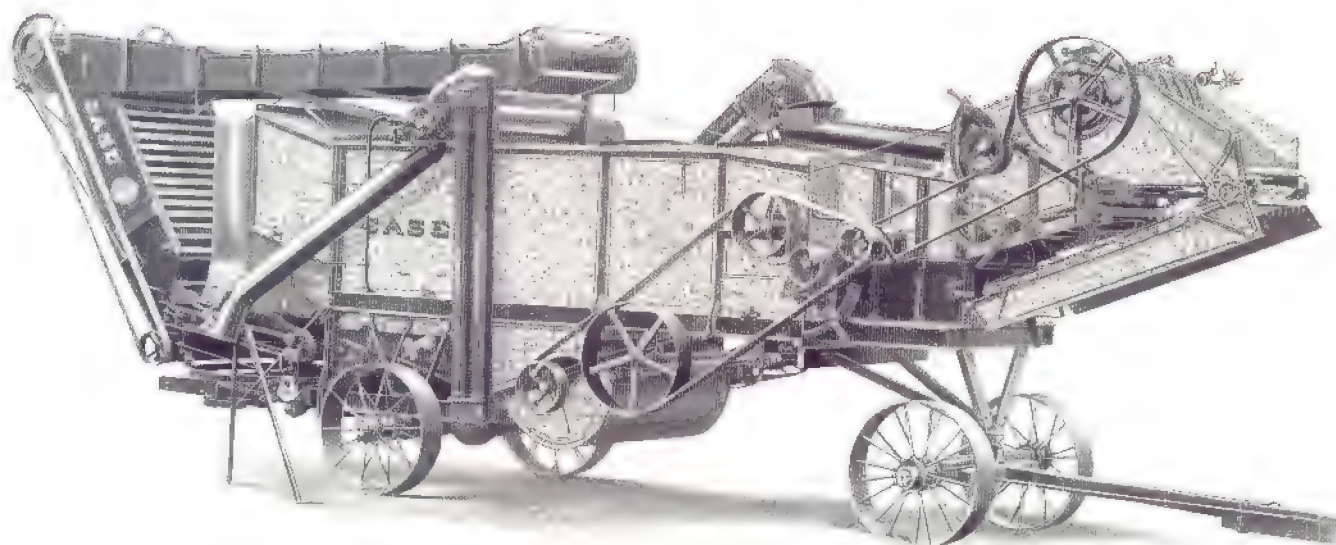
work satisfactorily on this machine. Will furnish the 18- or 24-foot Common Folding Stacker if preferred.

GRAIN HANDLER — The Nos. 1 or 2 Automatic Registers, the Nos. 5 or 6 Loaders or either of the Baggers work well on this size Threshing Machine.

TRUCKS — Wheels, 34 inches in diameter, 8-inch steel tires; 10-inch tires furnished on special order at extra price of \$8; steel spokes, steel axles, 12-inch skeins; spliced tongue, neckyoke, and whiffletrees. Brake furnished on special order at extra price.

EXTRA ATTACHMENTS — Such as Clover, Pea, Bean or Re-cleaner, Straw Bruiser, can be fitted to this machine and will be furnished at extra price on special order. \* The Rice Equipment is regular for rice machine.

*Prices quoted on pages 91 and 92*





# 54-Inch Steel Threshing Machine

*32 x 32-Inch Cylinder, Wind Stacker, Feeder, No. 1 Automatic Register,  
with Cross Conveyor and Wagon Spout*

**T**HIS threshing machine meets the needs for one of average capacity. Like all Case machines it has been tested under the most severe conditions, and never found wanting.

In its materials, in its design, and in its long lasting qualities, no farmer could insist on better quality than has been included in this Case.

So, when you figure its safety against the dangerous fires and how it withstands the effect of the destroying elements during all kinds of weather, you buy knowing that you have invested safely and wisely.

Price complete, as shown below, \$1010.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

## Specifications

**CONSTRUCTION** — Frame of structural steel; sides galvanized sheet steel.

**CYLINDER** — Length, 32 inches; diameter, 32 inches; speed, 1100 revolutions per minute; 20 double bars; 155 Sandow steel teeth with tempered blades and annealed shanks, which are interchangeable with concave teeth.

**POWER** — Built as belt machine, to be run by an engine. Regular pulley 13½-inch diameter, 9¼-inch face. We have several other sizes, any one of which will be substituted when specified in order.

**OUR FEEDER** will prove more satisfactory than the Hand-Feed Attachment. The latter furnished if desired. Special for headed grain, "Spokane Feeder No. 8."

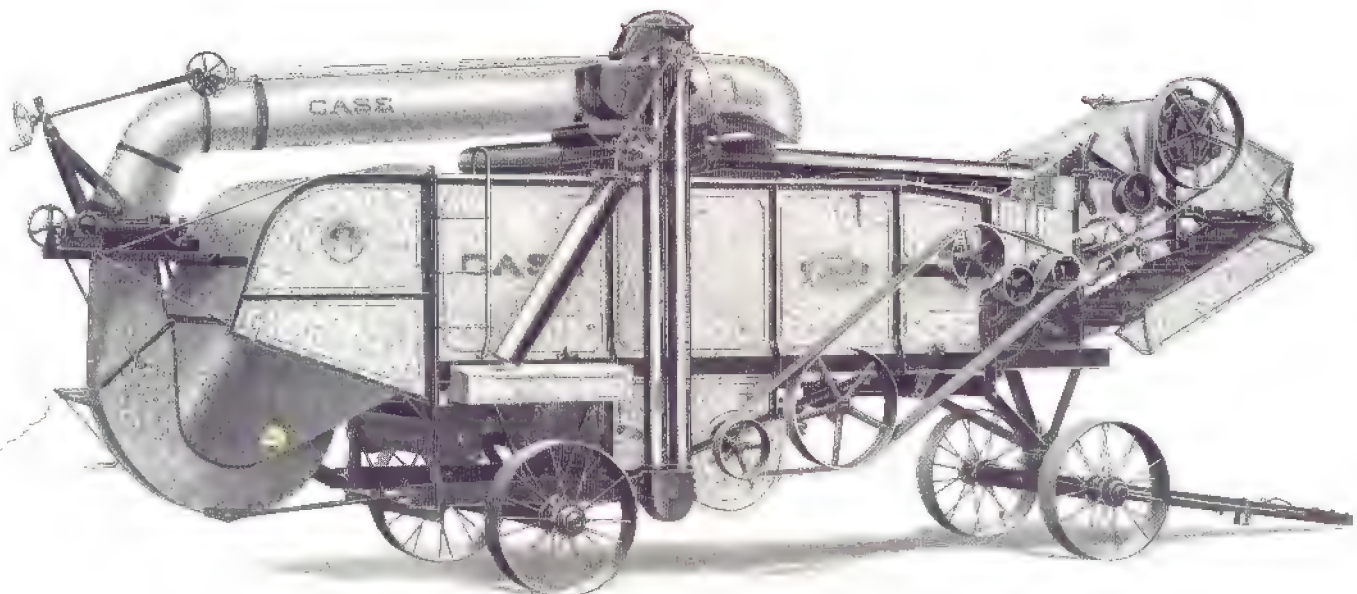
**STACKER** — The Gearless Wind Stacker is extensively used with this size Threshing Machine. The Attached Stackers are equally satisfactory. The 18- or 24-foot Common Folding Stacker furnished if wanted.

**GRAIN HANDLER** — The Nos. 1 or 2 Automatic Register is an ideal attachment for the 54-inch Threshing Machine. Nos. 4, 5, or 6 may be used if desired.

**TRUCKS** — Wheels, 34 inches in diameter with 8-inch steel tires; 10-inch steel tires furnished on special order at extra price of \$8; steel spokes, steel axles and 12-inch skeins; spliced tongue, neckyoke, and set of whiffletrees. Brake furnished on special order at extra price.

**EXTRA ATTACHMENTS** — Furnished on special order at extra price: Clover, Pea, Bean, Recleaner. Regular Rice Equipment for rice threshing.

*Prices quoted on pages 91 and 92*



# 58-Inch Steel Threshing Machine

## 36 x 32-Inch Cylinder, Wind Stacker, Feeder, and No. 2 Automatic Register

A USER of a 36 x 58 in South Dakota says: "The farmers around here want me to thresh for them next year, as I did the best job they ever had done. They have promised to wait for me any reasonable time if I will do their work. We are satisfied and the farmers agree with us that we save over 99 percent of the grain. I have made good money with my Case rig and I like the treatment I have received from your company." Another one from Iowa says: "I can keep ten teams busy in the field and clean the grain and get it all. I

have had 18 years experience and haven't found anything that can beat them."

And certainly there is no better evidence than that coming from the users themselves. We have pages of testimonials that tell about the good qualities of Case threshing machinery. If you want profits and good results — you won't and can't go wrong with Case.

Price complete, as shown below, \$1070.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

### Specifications

CONSTRUCTION — Frame of structural steel; sides galvanized sheet steel.

CYLINDER — Length, 36 inches; diameter, 32 inches; speed, 750 revolutions per minute; 20 double bars; 175 Sandow steel teeth with tempered blades and annealed shanks, which are interchangeable with concave teeth.

POWER — Built as belt machine, to be run by an engine. Regular pulley 13½-inch diameter, 9¼-inch face. We have several other sizes, any one of which will be substituted when specified in order.

FEEDER — The Case Feeder should be used with this size Separator. It is more economical and increases the capacity. Hand-Feed Attachment furnished if ordered, but at extra cost. A special Feeder for headed grain, "Spokane No. 8."

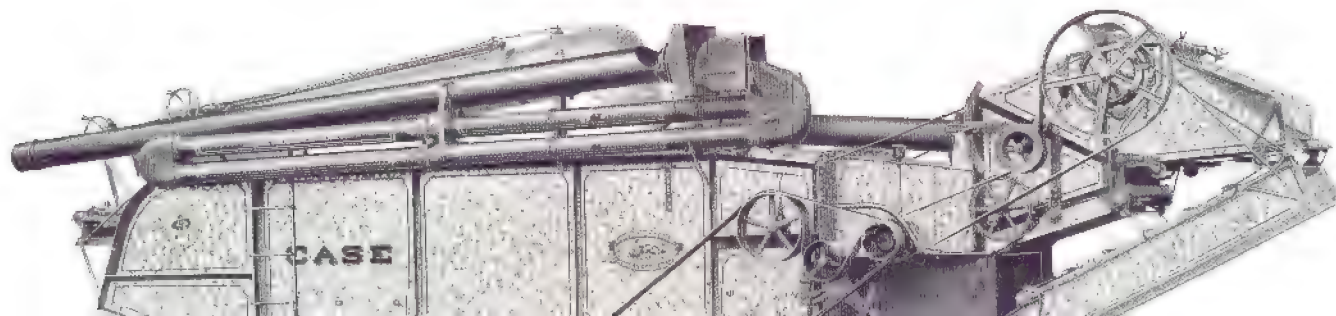
STACKER The Case Gearless Wind Stacker used with this machine makes an excellent threshing rig. The Attached or 18- or 24-foot Common Stacker can be used, if preferred.

GRAIN HANDLER — While any of our Automatic Registers, Loaders, or Baggers are serviceable, we may without prejudice especially recommend Nos. 1, 2, 5 or 6 as being best adapted to this machine.

TRUCKS — Wheels, 34 inches in diameter, 8-inch steel tires; 10-inch tires furnished on special order at extra price of \$8; steel spokes, steel axles; skeins, 12 inches long; spliced tongue, neckyoke, and whiffletrees. Brake furnished on special order at extra price.

EXTRA ATTACHMENTS — Furnished on special order at extra price: Recleaner, Clover, Pea or Bean Attachments.

*Prices quoted on pages 91 and 92*







# 62-Inch Steel Threshing Machine

## 40 x 32-Inch Cylinder, Wind Stacker, Feeder, and No. 5 Loader

**H**ERE is the largest of all Case Threshing Machines. Wherever you find the extensive grain sections, there you are sure to find this machine, faithfully doing its duty. With the proper attachments it will successfully handle all kinds of wheat, rye, oats, flax, speltz, barley, grass seeds, and other crops.

Every improvement that will aid the busy thresherman you will find embodied in this 40 x 62. It is the result of what we have gained by years of experience. It marks the last word in mechanical excellence. Details are found on the following pages. They will point out to you, a few of the many desirable features, how by means

of hard-oil compression cups this machine can be easily lubricated while in motion. And how easy it is to get to the working parts.

It shows why Case Steel Threshing Machines are in demand by the busy thresherman.

No machine on the market, we believe, has the ability to handle grain so quickly and economically, without waste of grain, as a Case. And thousands of farmers in all parts of the world are substantiating this belief.

Price **complete**, as shown below, \$1105.00 F. O. B. Racine, Wisconsin. Ten percent discount for cash.

### Specifications

**CONSTRUCTION** — Frame of structural steel; sides galvanized sheet steel.

**CYLINDER** — Length, 40 inches; diameter, 32 inches; speed, 750 revolutions per minute; 20 double bars; 195 Sandow steel teeth with tempered blades and annealed shanks, which are interchangeable with concave teeth.

**POWER** — Built as belt machine, to be run by an engine. Regular pulley, 13½-inch diameter, 9¼-inch face. We have several other sizes, any one of which will be substituted when specified in order.

**FEEDER** — The Case Feeder is recommended to get the best results. Hand-Feed Attachment furnished if specified in order, but at extra cost. Special for headed grain, "Spokane Feeder No. 8."

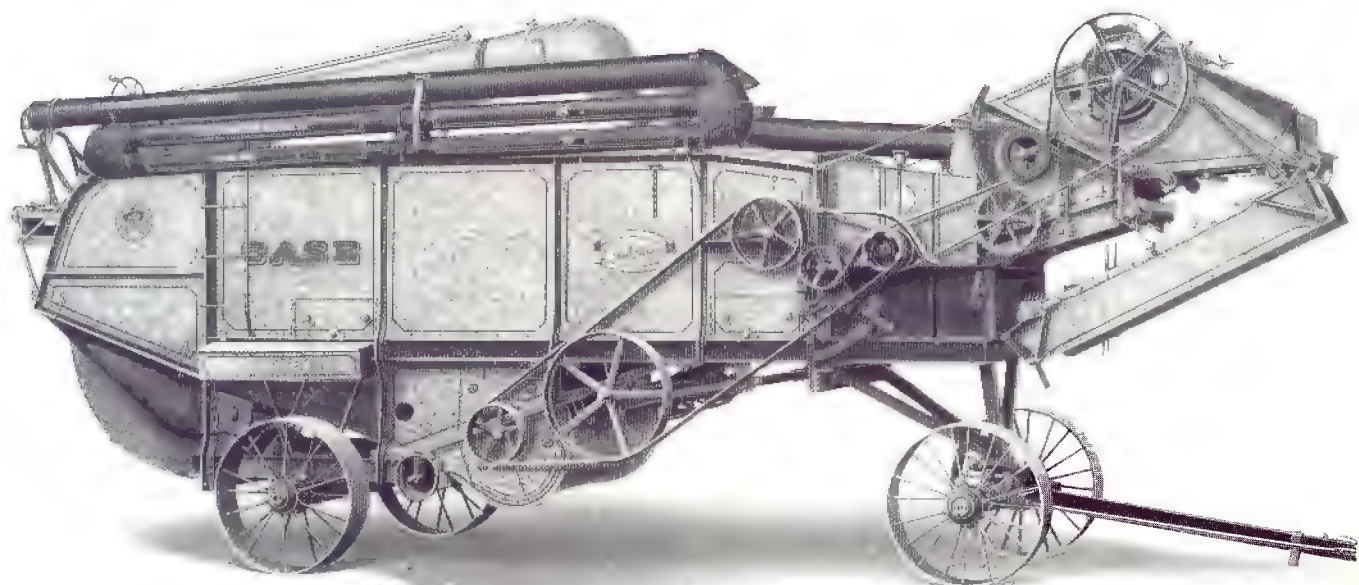
**STACKER** — The Case Gearless Wind Stacker is the most suitable. The Attached automatic or common slat styles, 18- or 24-foot, can be used if preferred.

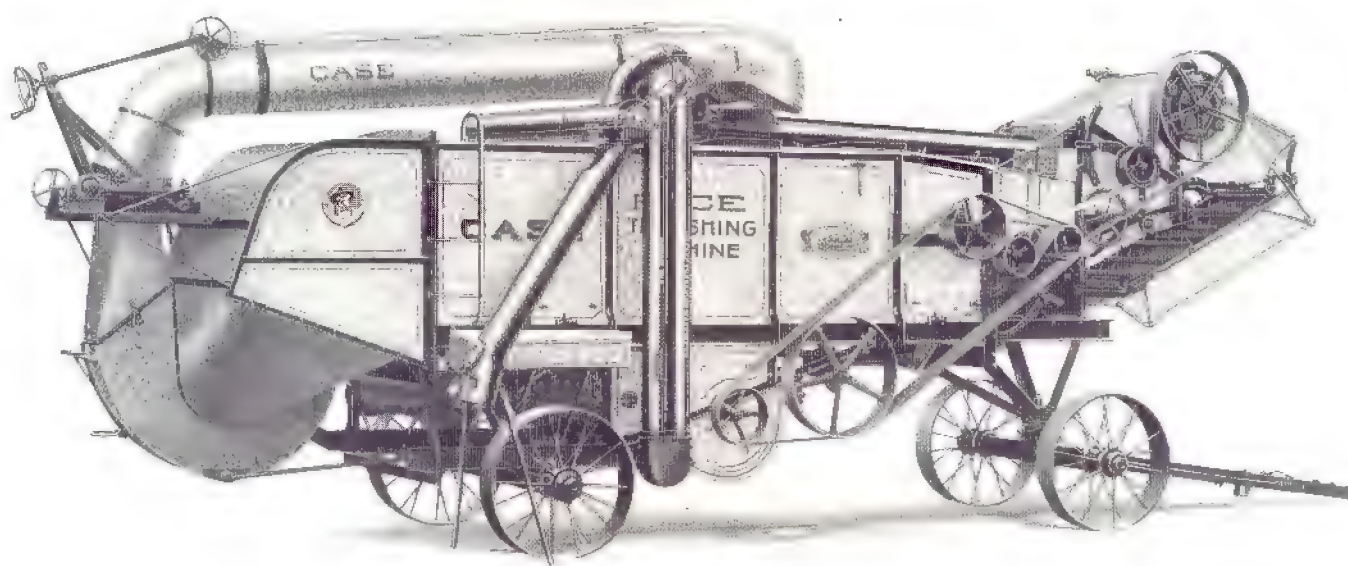
**GRAIN HANDLER** — The No. 2 Automatic Register or the No. 5 Loader is generally used with this machine. The No. 1 Automatic Register or the No. 6 Loader will also give equally efficient results.

**TRUCKS** — Wheels, 34 inches in diameter, 10-inch steel tires; 12-inch tires furnished on special order at extra price of \$8; steel spokes, steel axles, 12-inch skeins; spliced tongue, neckyoke, and whiffletrees. Brake furnished on special order at extra price.

**EXTRA ATTACHMENTS** — Any of our extra attachments except Peanut and Straw Bruiser, will be furnished with this threshing machine at extra price.

*Prices quoted on pages 91 and 92*





## Case Steel Rice Threshing Machine

*Fitted with Wind Stackler, Feeder, and No. 6 Bagger*

RICE threshing puts very heavy demands on a machine, and especially Honduras rice, with its long, heavy, and tough straw. Then, too, the threshing often has to be done near standing water, or the machine

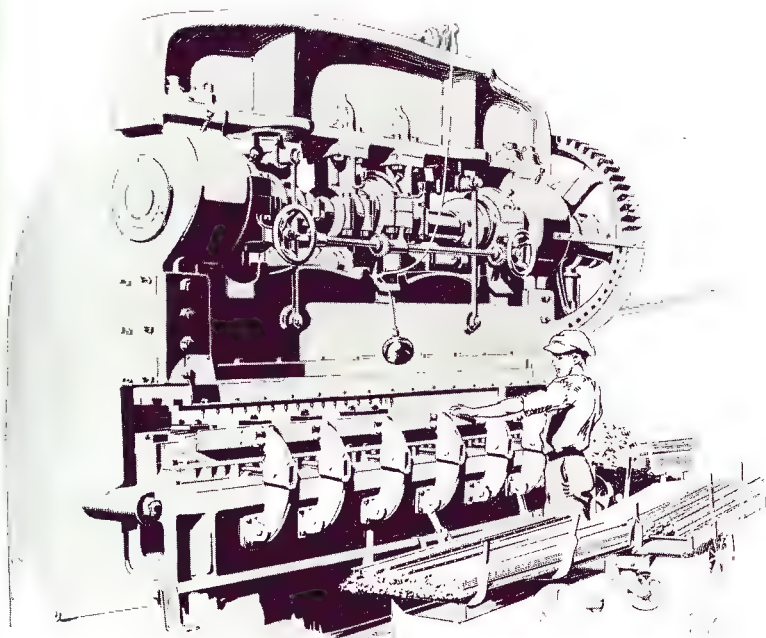
is stored where it is exposed to dampness. Under the conditions exacted by the rice thresher, there is no machine made which can compare in value with that of the Case Steel Rice Threshing Machine. The difficulty of the threshing does not bother its threshing quickly and thoroughly. Climatic conditions do not warp nor distort it. Being light in weight, compact in construction, with axles close together, and with a full circle swing to allow a complete circle of the pole, it permits of turning in cramped places, or of storing easily. This Case Rice Thresher demands your further attention, if you want one that will bring the best results.

One of the users of this machine says:

"My customers and expert rice men tell me the Case rice separator cleaned the rice better and cracked less than any of the other make of machines. I was not delayed at all by breakage."

"I can write authoritatively of the substantiality of the Case separator, for when I first unloaded the separator, the team pulling it ran away, dashing the machine into an electric light pole. I naturally supposed the frame had been put out of line, but my fears were illfounded as the operation of the machine later showed. Not a rivet was broken, and the frame was not out of line."

"Including one move, our best day's run was 1500 sacks, each sack weighing 100 pounds, which I consider exceedingly good. In conclusion will state I am pleased with the machine and with your courteous treatment."



One of the big multiple punches used in punching various parts of the separator, such as separator rails and many other parts of the framework. In some operations as many as 26 holes are accurately punched in one operation. These modern machines are big money and time savers, which consequently enable us to sell cheaper and still maintain quality



# Case Steel Peanut Threshing Machine

## *Fitted with Common Stackler and Hand-Feed Attachments*

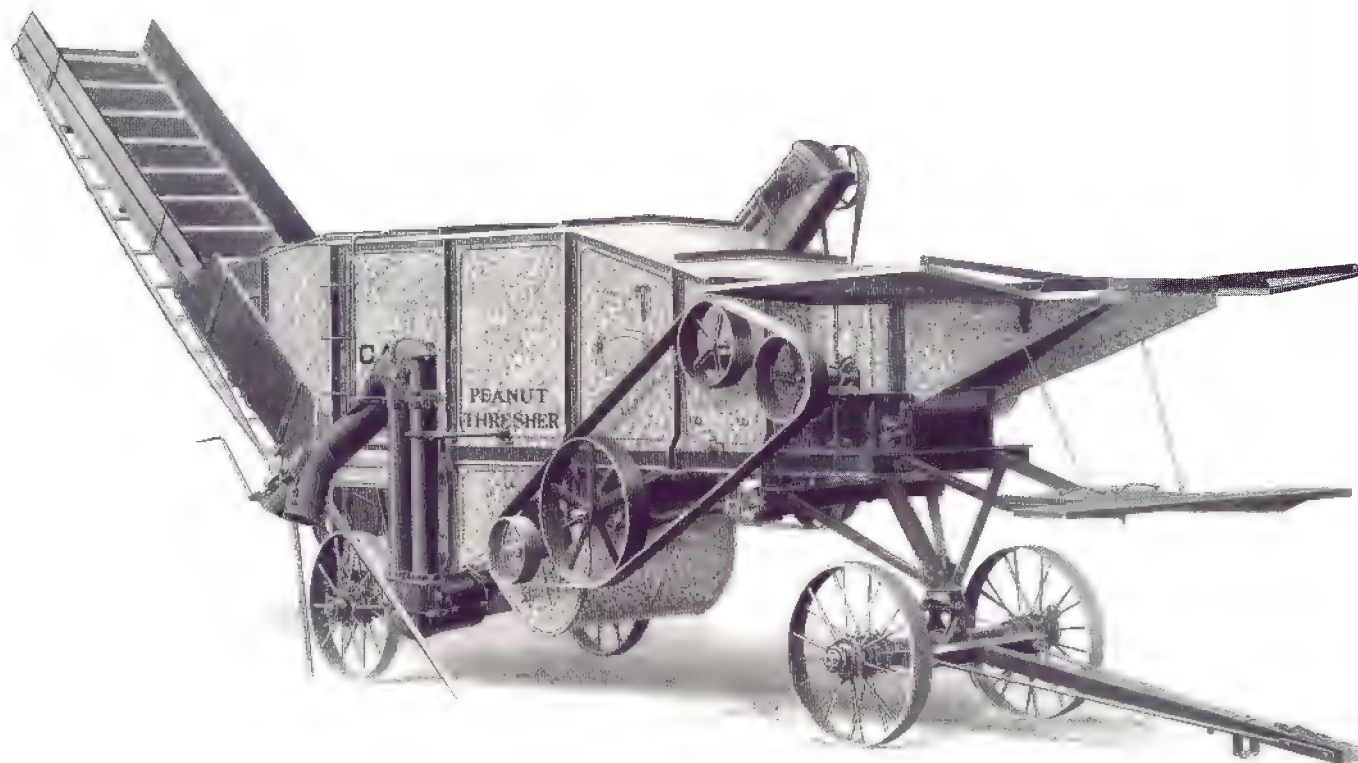
THE working parts of the Case Steel Peanut Threshing Machine are protected from the sand and the soil which is taken into the machine by the vines, and causes extreme wear if these parts are not protected. The wide separating mechanism of this thresher gives ample capacity for working at a very rapid rate. The vines are delivered from the cylinder to the separating rack, which, by its motion, tosses them slowly towards the rear of the machine, while the peanuts fall through the slatted rack to the conveyor. The rack is long enough so that complete separation is accomplished within the machine. The peanuts are carried to the conveyor sieve where the fan blast and the first process of cleaning takes place. They next drop to the shoe which has a short, rapid end-shake. From the shoe they are conveyed into the bagger trough, which is perforated in order to screen out all sand and pulverized dirt. From there they are elevated into the bags. The vines, on coming out of machine, are left in splendid condition for hay, as the sand and dirt is knocked off by the cylinder and by the rocking motion of the separating rack. This machine can be changed into a regular grain separator.

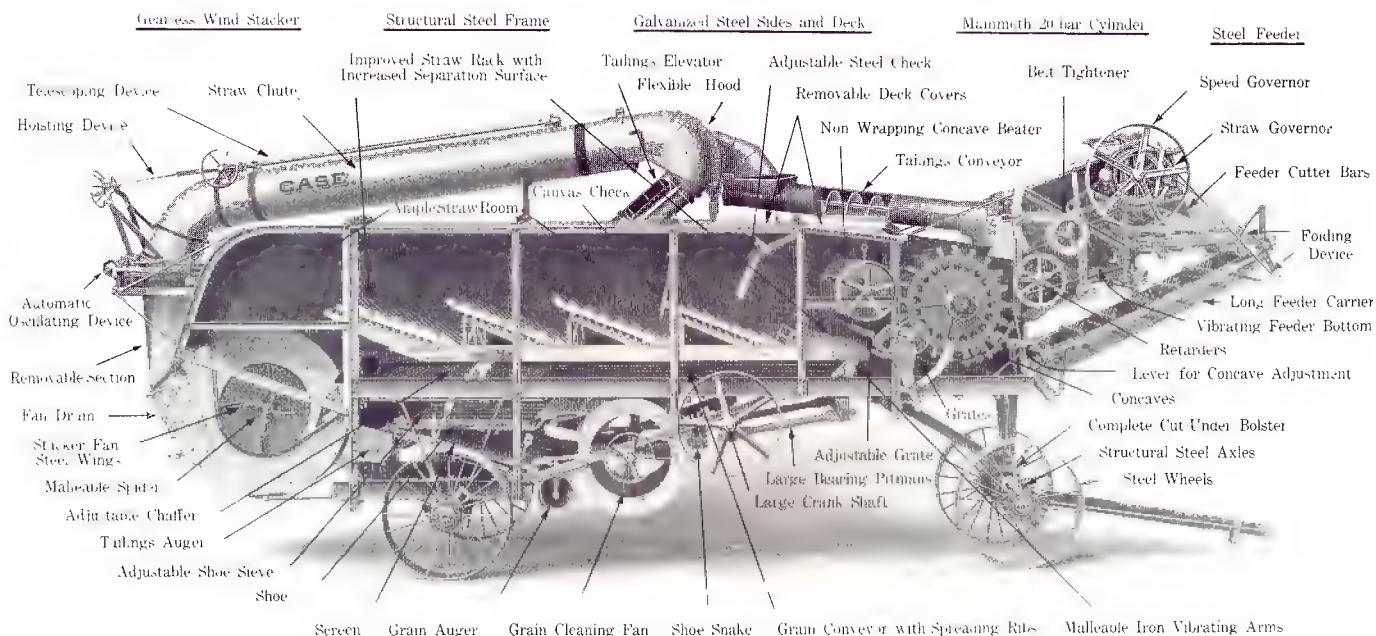
The features of this peanut threshing machine cannot help but commend it to any one requiring a machine for this class of work. Every regard and attention has been paid to its simplicity. Like every other Case product, it is built of good materials and honest workmanship.

Clean, fast work, are two of the requisites of a good threshing machine. And these are only two of the factors that have made Case machines popular. Don't take our word for this. Ask any Case thresherman in your locality. But there is another feature which has proven valuable to many farmers. That's the steel construction of Case machines. It means that you are absolutely protected against the elements of fire, wind, and water which are so destructive, and which have damaged and destroyed hundreds of wooden machines.

Study carefully the details of Case Threshing Machines explained in the few following pages. They will prove both interesting and valuable to every thresherman and farmer.

*Prices quoted on pages 91 and 92*





## Simplicity of the Case Steel Threshing Machine

THE above sectional view of this typical Case steel threshing machine with feeder and wind stacker, indicates the simplicity of its construction. Because of this simplicity it takes less power to drive one of these machines in the belt, as well as less to haul on the road. This feature of Case construction gives a great advantage to the owner of these machines over those of other makes, for the very reason that there are fewer parts to get out of order, and consequently their repair bills are less. Further, when you start out to thresh you want to *keep* threshing. You do not want to waste time getting lined up or oiled. Also, you do not want to crawl through and over the machine to oil and line up the boxes, shaft bearings, etc. In this machine all wearing parts are within easy reach. With our system of oiling with pressed steel compression cups for hard oil and large cylinder oil cups, raised above the pulleys, all wearing parts can be lubricated while the machine is in operation. Thus the fact that this steel separator is practically inde-

structible and that it is easier to operate because it has fewer parts, in combination with its large cylinder capacity and efficiency, warrants the reputation that it has gained of being unquestionably the best threshing machine on the market.

We call your attention to the illustration and ask that you note the large separating surface at the cylinder. Also note the narrow space between the beater and the grate below, through which the straw must pass before falling on the straw rack.

It is a fact that practically all the grain is pounded out of the straw before it reaches the straw rack. The few kernels still remaining are shaken out by the fish backs and risers on the straw rack before the straw has finally reached the end of the rack where it falls into the stacker.

Over 90 percent of the grain is separated at the cylinder in a Case steel threshing machine.







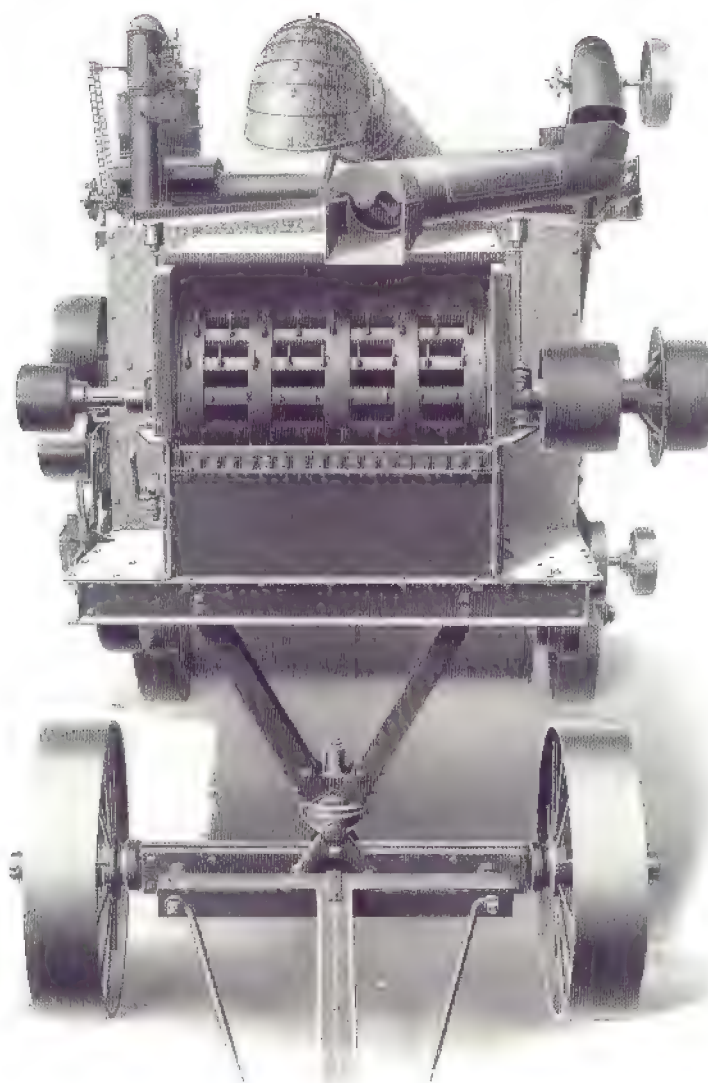
## Case Steel Machines Thresh all Grains and Seeds

WITH proper adjustments and attachments, which we are prepared to furnish, there is not a seed nor grain grown that cannot be perfectly threshed by a Case machine. These are the more important of such grains and seeds: Wheat, oats, rye, barley, flax, clover, alfalfa, rice, peas, beans, peanuts, timothy, sorghum, orchard grass, millet, buckwheat, speltz, Hungarian grass, blue grass, red top, kaffir corn, milo maize. Our general purpose machine will separate from their straw and vines all of these grains and seeds, with the exception of rice, peas, beans and peanuts, and will clean them ready for the market. For these four products extra attachments are necessary. The regular equipment, however, will

care for any of the rest. For clover, alfalfa, kaffir corn, orchard grass and brome grass, an extra sieve is used, and sometimes special rasp teeth in the concaves.

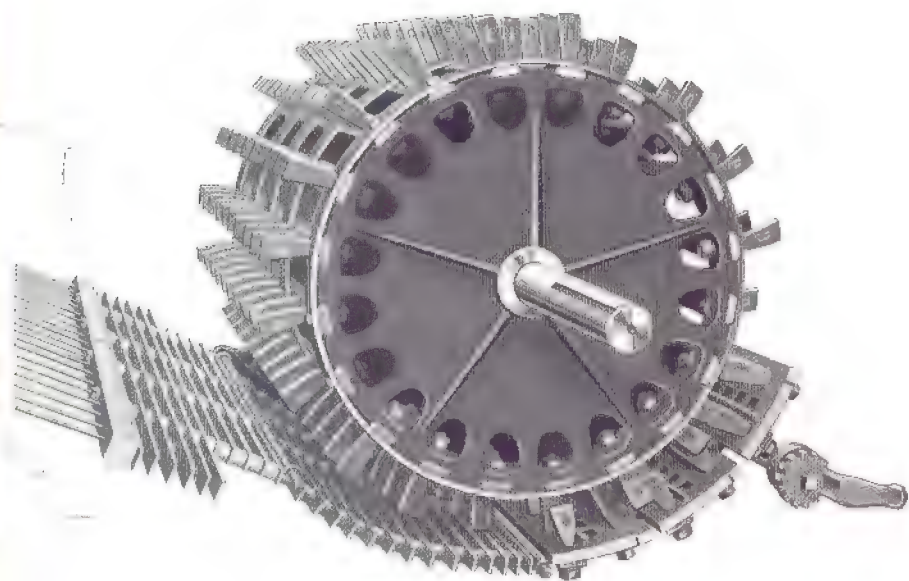
### *Front View of Case Threshing Machine*

There is one very important feature to be noticed in this view, and that is the front axle with its extra strong construction. You will note that there is clearance room allowed so that the wheels can be turned around completely, permitting the machine to be stored in a very much smaller shed than is generally possible. It is also a great advantage when turning in a comparatively small space.



## Separating Mechanism

ONE of the great factors in the success of Case machines is their immense concave and grate surface, that part which first takes care of the greater part



Showing Cylinder, Concaves, and Grates

of the separation of the grain. The large cylinders made possible to increase this surface in Case machines to 52 inches, as indicated by the accompanying illustration.

Immediately back of the grate surface is the beater, which spreads the straw as it passes from the grate, and delivers it to the straw rack in a thin, even sheet, the full width of the machine. The concave-shaped wings of the beater prevent winding of straw under all conditions, and deflect the flying grain downward, materially aiding separation.

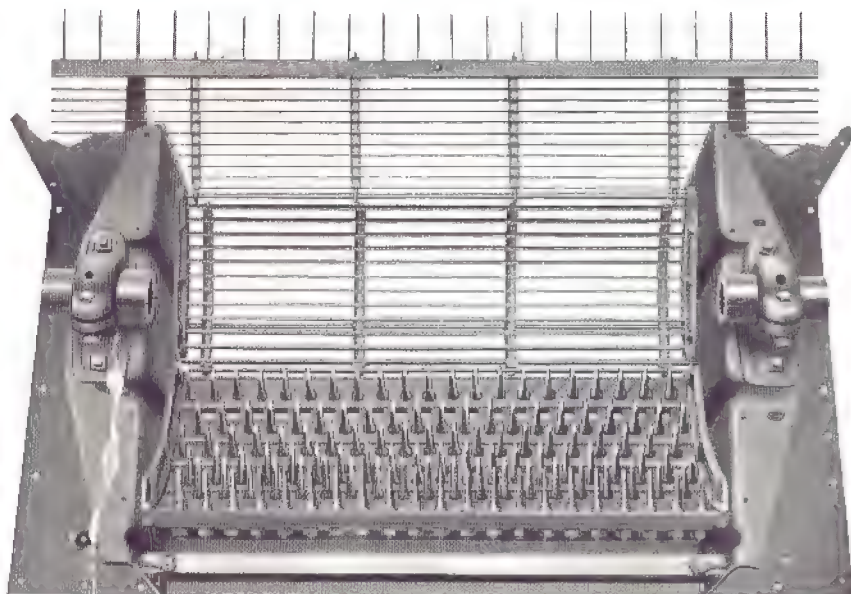
*The Case Big Double-Bar Cylinder.* The big 32-inch diameter cylinder of the Case is responsible for its enormous capacity, its thorough separation and its steady, uniform motion. It enables it to work when conditions are not favorable, due to wet weather and damp straw, for instance. A user of one of these machines in Indiana, whose name we will furnish on request, tells of his threshing on the Wabash River bottoms, when the wet weather made it the worst threshing that he had ever seen. Many of the shocks were standing in low places and went into the feeder wet and muddy. Another one, also in Indiana, tells of the successful threshing of long, tangled shocks that was all grown together, and so wet that water dripped off the bundles. In both the feeder and the machine took the grain without any trouble, and produced results to the astonishment of the farmers. Every experienced thresherman knows that the Case

big cylinder machine is the one thresher that can deliver the goods in quantity and quality under all conditions. Some manufacturers build a 16-, 18-, and 22-inch cylinder, and call it large. Ours is 32-inch. With the small cylinders the machines cannot be supplied with the grate surface for separating, nor can the machines be run with as steady motion, which is necessary in clean threshing. Wet weather and damp straw also prevent the machines with small cylinders from working. Many times have these features in other machines resulted in compelling the thresherman to wait for favorable conditions, while in the immediate vicinity the Case machine with its big cylinder went right on working. In the threshing season delays such as these are expensive.

*The Case Cylinder-shaft* is larger and the cylinder drive pulley is twice as large as those of the small cylinder machines. Thus greater surface is given for the drive belt and no slipping nor unsteady motion is found. This illustration of the concave and grate gives an idea of the immense separating surface of Case machines. The cut also shows the ample bearings and the pressed boiler steel sides on which the cylinder rests.

*The Case Improved Ball-and-Socket Pivoted Cylinder Boxes* are self-aligning, extra long, and strong. They are adjustable, and should they become worn can easily be replaced.

*Twelve and Twenty-Bar Cylinders and Pulleys.* This illustration is to enable you to compare the twelve and twenty-bar cylinders, also their pulleys. The larger cyl-



Looking down on Concaves and Grates in 20-bar Cylinder Machine

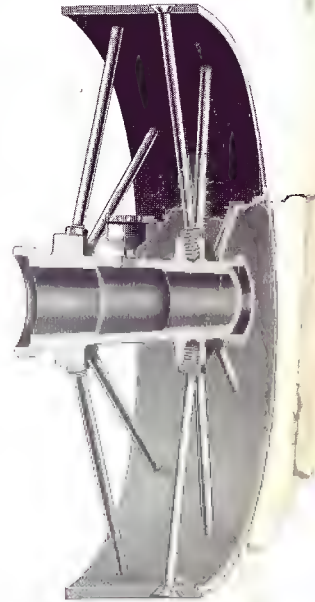




# Construction of Case Steel Threshing Machines

**THE Frame.** The fundamental strength and durability of our threshing machine is its frame. We boast of the fact that these machines do not warp nor get out of shape, and it is due largely to the care with which the strength of each part is figured, and the workmanlike way in which they are put together. The main sills are heavy steel channels, thus giving a good support for the other structural parts. Note, please, the front part of the frame, particularly where the cylinder rests; note the extra heavy plates of pressed boiler steel. Also note the four angle-iron supports under the main sills from the four corners of the part of the frame that carries the cylinder. These braces are very strong and are brought

ing Machines last so long. Many of them are used in the rice threshing district, exposed to extreme dampness; others are used near the equator, exposed to extreme heat, while still others are used in the far North, where they must stand the continued contraction and expansion due to the sudden changes in temperature, as between the cold of the night and the heat of the day, where a wooden machine would last but a very short time. Under all conditions they prove the wisdom of the Case type of construction.



Construction of Threshing Machine Truck Wheel

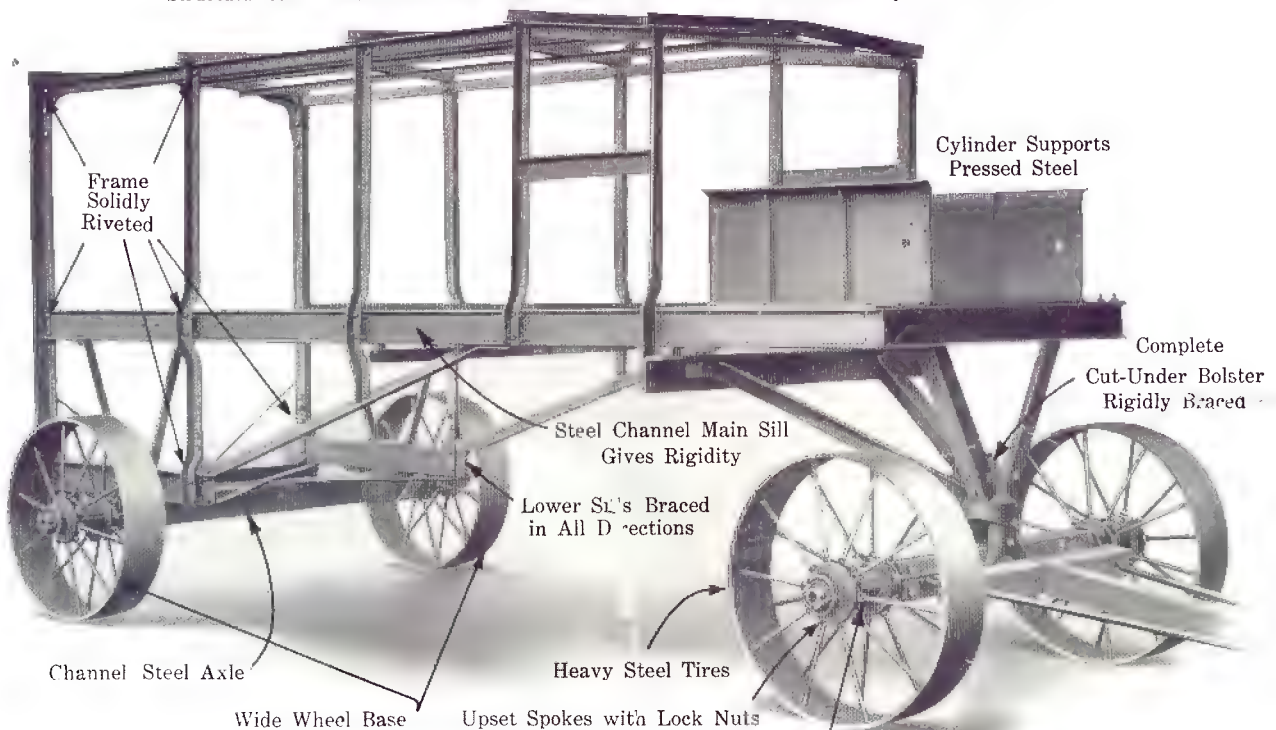


Steel Axles that don't break, warp nor wear out

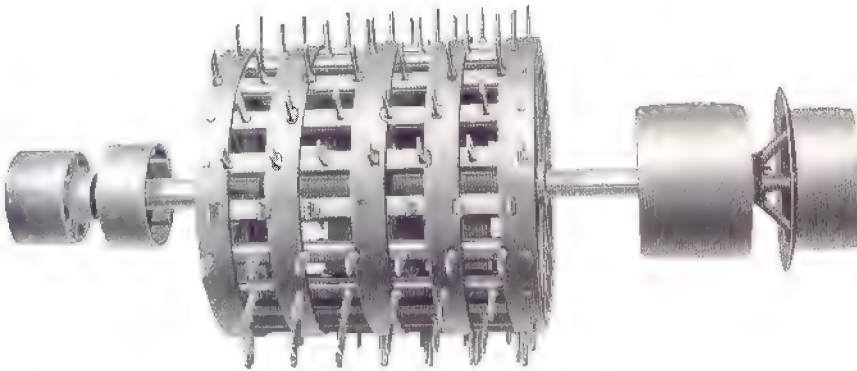
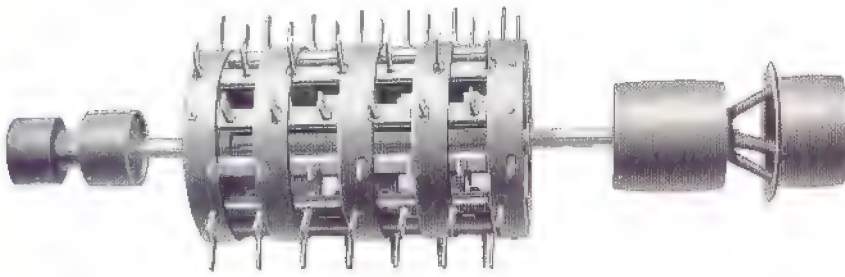
together at a common point in the center of the front axle. This distributes the load scientifically between the front and the rear axles. The rear of the machine is also strongly braced with T rails and angle irons. It is due to such points of construction that Case Thresh-

**Trucks.** This sectional view gives a good idea of the strength of the steel tire and spoke type of wheel used on these machines. The tires range from 6 to 10 inches wide, on regular order, and from 4 to 12 inches on special order. The tires are wide enough to carry the machine over the softest ground, and also afford a substantial base for the entire threshing machine when in operation. The hubs are long. The steel axles are ~~are~~ against breakage. Each machine is equipped with splice-tongue, doubletrees, and neckyoke.

Structural Steel Frame—Galvanized Sheet Steel Side and Deck Sheets are Solidly Riveted to Frame



Hubs with Liberal Bearings Easily Lubricated



Comparative size of 12 and 20-bar Cylinder

veyor or pan. When the straw rack goes forward the grain pan comes back, and *vice versa*. The straw rack has a rising and falling motion, as well as one forward and backward. The bearings of these oscillating parts are attached to the main sills of the machine, assuring, thereby, rigidity and freedom from vibration. The straw rack is one of the very few wood parts of a Case machine.

*The Case Grain Conveyor* is built so that it is impossible to carry grain all on one side.



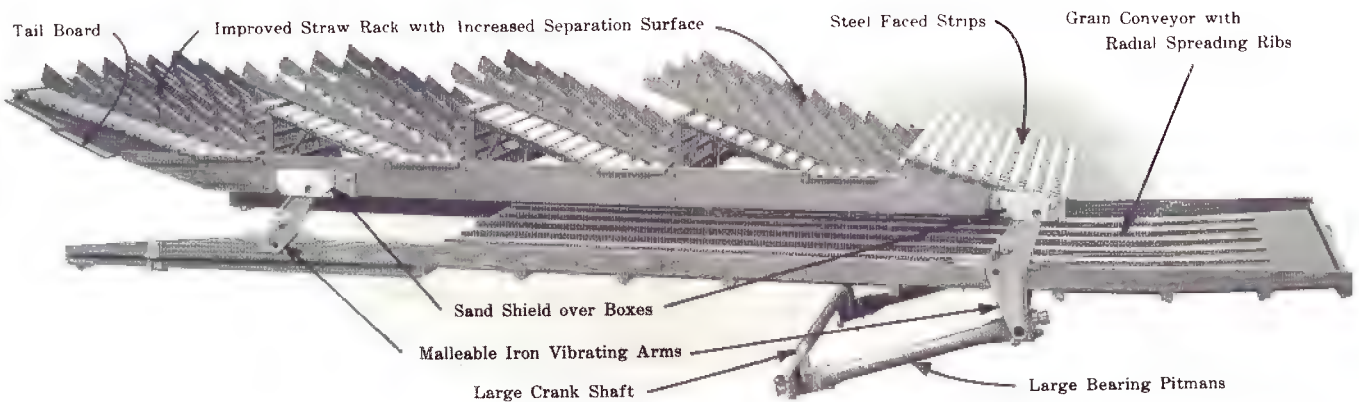
Cylinder Bearings

inder illustrates so clearly its greater capacity and efficiency, that argument in its favor seems almost out of place. Note, if you will, the advantages in the size of the shaft and pulleys of the larger one, compared with the smaller one. The shaft of the twenty-bar cylinder is made of steel 2½ inches in diameter, while the regular pulley for the main drive belt is 13½ inches. This affords 50 percent more contact surface for the drive belt, which prevents slugging, and the loss of power. To the width of the bands and the spacing of the teeth we also call your attention.

*Straw Rack and Grain Conveyor.* Our straw rack is hung or balanced on the same rocking arms as the grain con-

Running lengthwise are square strips of wood about an inch high that prevent the shifting of the grain, should the machine not be set level. These strips are placed closer together at the front end than at the back. This arrangement forces the grain to an even distribution over the sieves, and with it Case machines clean the grain even better than ever. Underneath the grain pan are strips of wood running crosswise to strengthen the conveyor in both directions. The pan itself is of galvanized sheet steel.

*Cylinder Teeth.* The matter of cylinder teeth is one that has had particular attention by our designers and mechanical experts. As a result of their extended experi-



Straw Rack and Grain Conveyor





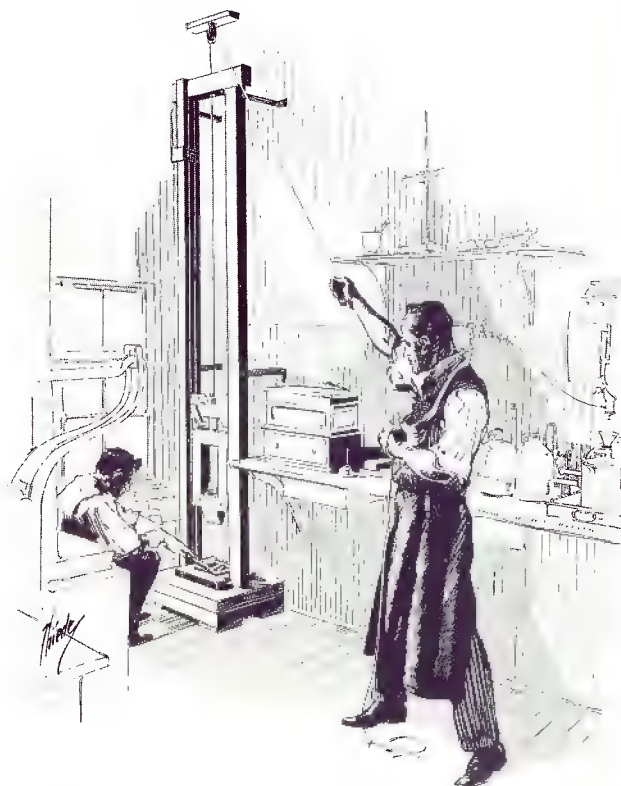
Interchangeable, Annealed and Tempered  
Cylinder and Concave Tooth. Nut  
and Spring Washer



Showing Spacing of Cylinder and Concave Teeth

ments in our laboratories and in the field, under the guidance of our engineers and from the reports of the threshermen, we are equipping our machines with the interchangeable cylinder and concave teeth, made of special steel rolled to our own formula, annealed and tempered after being formed. This special treatment has been the result of years of experimenting, and we are confident that the result is a perfect tooth. The size has been increased, and metal added where most needed. Much strength has been put in at the shank to prevent breakage.

Threshermen appreciate the advantage of having interchangeable cylinder and concave teeth. We could cite you innumerable examples of those who have had forks go through the cylinders with no serious results to the teeth of these machines; of the forks there was nothing left. An incident of this sort so impressed one man, whose name we can give you, that he bought a rice-threshing machine for his use. Another man records the fact that at four different times forks have gone through his cylinders, and not a single tooth broken. To this fact he adds that if his machine had been of wood, a fire which damaged it only slightly would have made it a complete wreck. But the Case machine, he says, is practically as good as new. These are the things that count. They make for permanence, and permanence plus good work makes profit.



A corner of the Case laboratory showing the Cylinder Tooth Testing Machine. Each day stock specimens of teeth from the forge shop are tested for strength, as shown in the illustration. Every tooth must withstand a test of thirty blows of eight hundred foot pounds per blow.



## Case Feeders

OUR Case feeder is shown on this page by the right and left hand views and is built to attach to Case separators only. These two views, together with the sectional view on the following page, show its construction and give an excellent idea of the working parts.



Right Side of Case Feeder

With most threshermen, a feeder is now regarded as a necessary device for saving labor, time, and money. Our Case feeders being especially designed for attachment to Case threshers, a perfect fit is guaranteed for any size Case machine, and they can be easily and quickly attached without the aid of skilled mechanics.

The following concise description will render more clear the construction and operation of the different component parts.

Essentially, the feeder is made up of a bundle carrier, a band cutter, and a cylinder-feeding apparatus, all of which is under control by the governors.

The governor mechanism is an important part of the modern feeder. Case feeders have two governors embodied in them, viz: the *speed governor* which stops the entire feeder when the speed runs down and when the cylinder is liable to clog, and the *straw governor* which takes care of bunches and conduces to even feeding of the thresher cylinder.

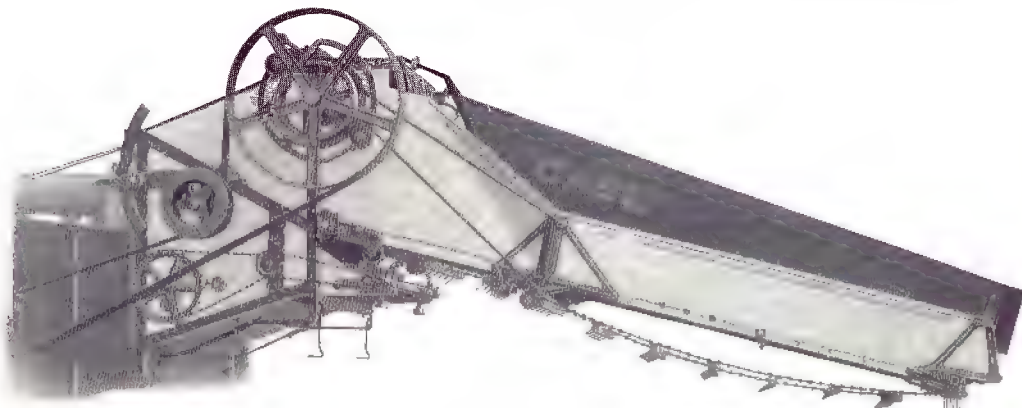
The straw governor is the best and most practical device ever incorporated in a thresher feeder to aid in even feeding to the thresher cylinder, and may be regarded as the "brains" of the machine. It takes care of bunches by momentarily stopping the chain rake and allowing the knives to cut down and thin out the material. By means of the thumb nut at top on right hand side, any adjustments needed to the straw governing mechanism may easily be made while the machine is in motion. Thus the amount

of grain delivered to the thresher cylinder may be regulated at will by the operator regardless of improper or spasmodic pitching.

In Case feeders the band cutting and feeding is by reciprocating cutter bars with serrated knife sections and steel fish backs. The crank shaft driving the cutter bars has large, wide bearings—three on the 18-inch, four on the 24-inch, five on the 28- and 32-inch and six on the 40- and 44-inch sizes. These reciprocating band cutters do the work much more effectively than rotary knives and being made up of serrated sections are self sharpening. It is not necessary to carry an emery grinder with the outfit. The cutter bars, with metal fish backs on top and bottom form a very efficient mechanism in conjunction with the notched hopper bottom for feeding grain to the cylinder. The hopper bottom has been strengthened for the coming season and the bearings made fifty percent wider.

The retarders are also an important factor in the even feeding of grain to the cylinder. These have been changed for the coming year—the star wheels being of malleable iron, the shaft enlarged, and the drive simplified. Three speeds are provided for the retarders—the slowest for damp, tough grain, the medium for dry bundles and the fast for headed grain. These changes are made by reversing the idler sprocket to get the extreme speeds while the medium is had by running the drive chain direct and using the idler as a tightener only.

The carrier on our Case steel feeder is self supporting and can be folded in half a minute with one hand. The rake has two No. 55 steel sprocket chains carrying hard wood slats in which are inserted large spikes that materially assist in the feeding operation by holding back the under side of the bundles. Two speeds are provided for the rake, the change being made by shifting a small



Left Side of Case Feeder



gear at top on right hand side, which may be done, easily and quickly without loss of time.

Our Case feeders are provided with a number of adjustments to suit them to any requirements of the grain or condition of the straw; such as cutter bars, adjustable up or down, varying speed for retarders (can also be raised easily for ready access to cylinder), varying speed for rake, adjustable straw governor, etc.

The straw governor "shoes" which are of channel shaped steel have been shortened, making the straw governor much more sensitive, as they drop quicker after a bunch passes under them, thus allowing the chain rake to start promptly. In fact the length of time it is stopped is often almost imperceptible, but prevents slugging of the cylinder.

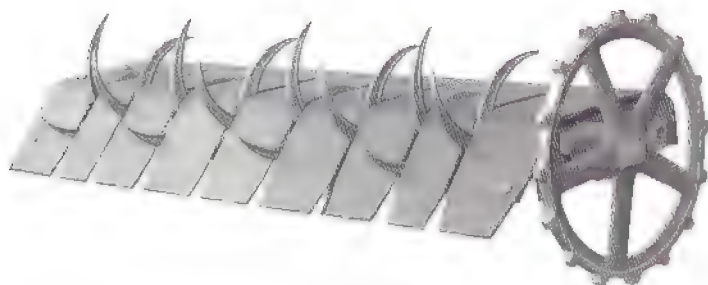
We have also added a guard for the feeder drive belt, which is a great step in the direction of "Safety first" and permits the operator to stop the feeder at will by



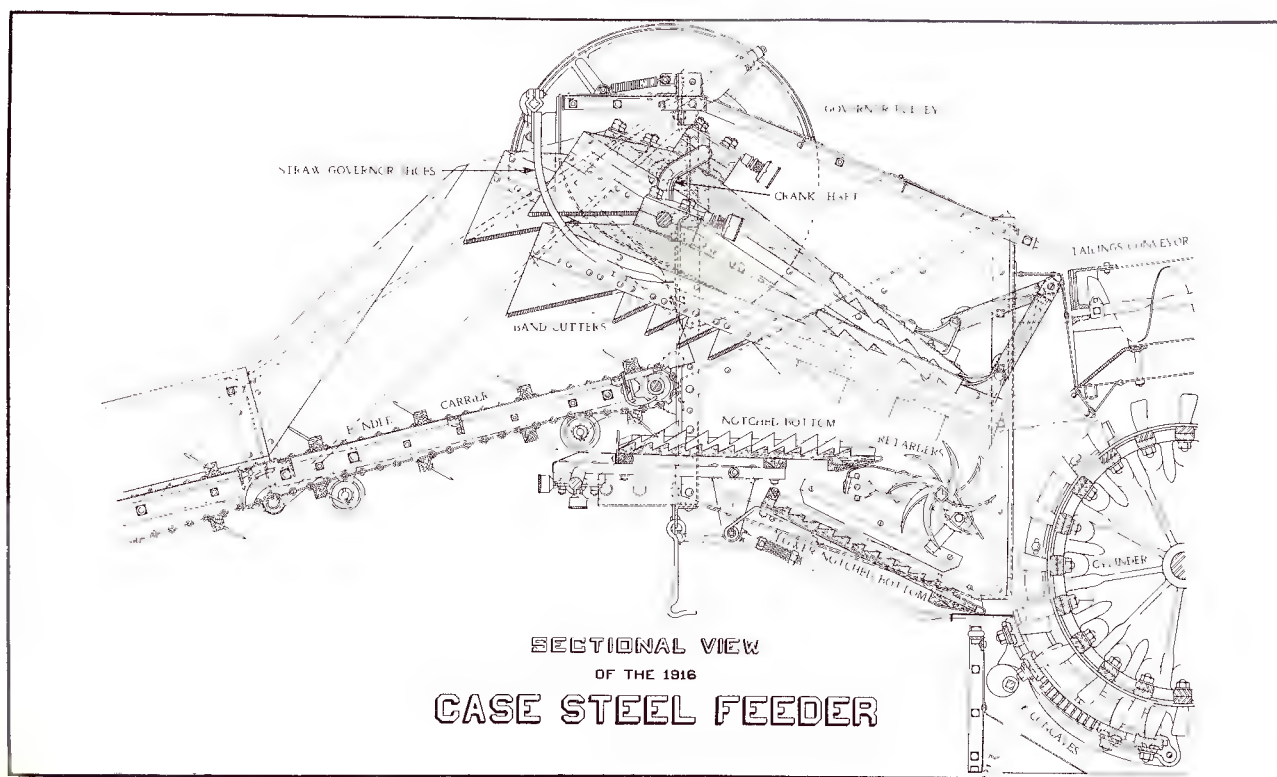
Straw Governor Shoes, Cutter Bars and Friction Speed Governor

simply releasing the belt tightener — the belt always remaining in place on the pulleys.

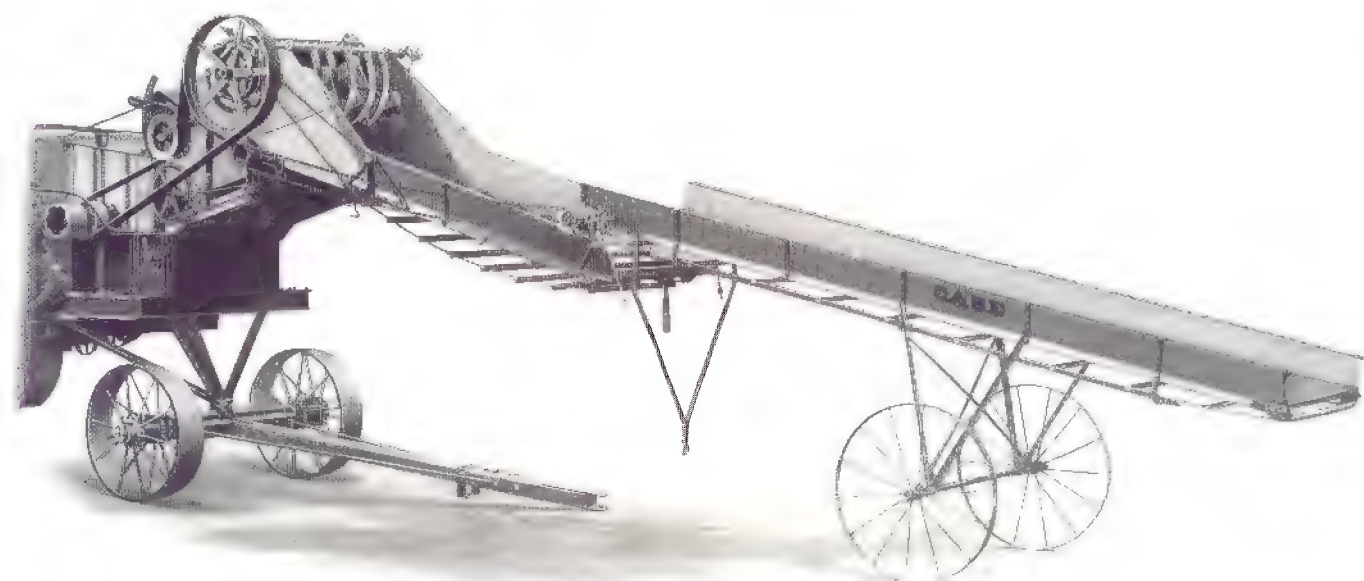
The speed governor has been materially improved, making it much more sensitive and easy of adjustment. The mechanism for driving the chain rake and hopper bottom includes a safety clutch for the prevention of accidents and breakage. The slide for hopper bottom may easily and quickly be removed for access to the cylinder. The Case feeders are simple and positive. They are easily operated and easily kept in order. With this year's improvements there is no feeder made that can touch them for performance. This we know.



Retarder



SECTIONAL VIEW  
OF THE 1916  
CASE STEEL FEEDER



## *Universal Mounted Steel Extension Feeder Carrier*

THE Universal Mounted Steel Extension Feeder Carrier, here illustrated, is the same as the old-style mounted feeder extension, except that it has provision made so that it can be used on either side, as well as directly in front of the feeder carrier proper. This extension increases the capacity of the machine by making it more convenient to get grain to the feeder, especially in the headed grain districts.

The extension carrier is 13 feet 4 inches long and is easily moved and set. It is provided with a draw-bar, and can be hitched on behind the threshing machine or tank wagon

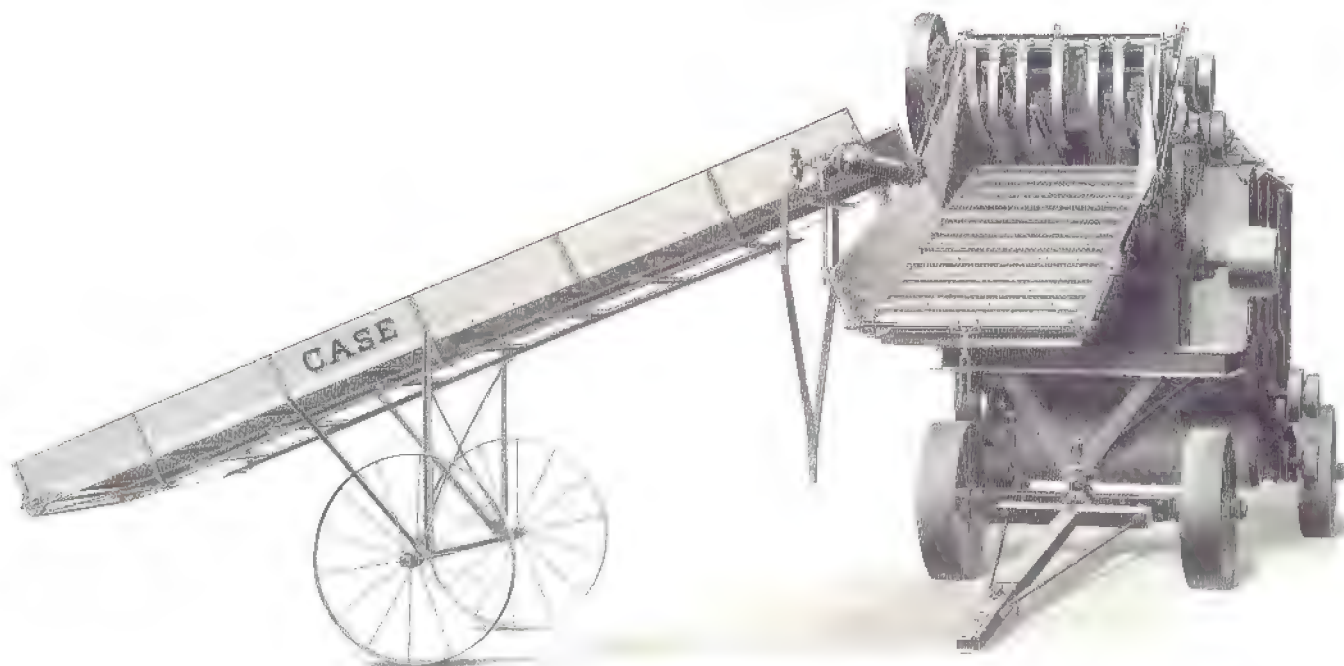
To set, it is only necessary to place the carrier in position and put on the drive chain. This chain is a steel pattern, No. 55 links, and will not unhook or fall apart when taken off the sprockets.

The rake is similar to that of the regular feeder. The idler-shaft boxes are provided with screw adjustments for tightening the rake.

The truck wheels are 36 inches in diameter, and have 2-inch tires.

The mounted carrier is built in four sizes: for 28-inch, 32-inch, 36-inch, and 40-inch cylinder threshing machines. Price complete, \$40.00, F. O. B. Racine, Wisconsin.

*Prices quoted on pages 91 and 92*



Universal Extension in Side Position



## Case Spokane Feeders for Headed Grain

IN Washington, Oregon, and California, the grain is headed, and stacked in ricks. The Case Spokane Feeder, used in connection with derrick forks and a

the best materials and in the same high-grade manner as our threshing machines. Being made especially for Case machines they fit without change. They are made

for either twelve or twenty-bar cylinders. No. 9 Spokane Feeder is similar to No. 8, but both head and carrier are very much shorter, and the carrier stands in line with the machine. It is used mostly with horsepower outfits, and the derrick wagon should be made high enough to allow the tumbling-rod to pass under it. But one derrick fork is commonly used. The carrier is provided with a single set of Cobb Spreaders. The friction clutch is not necessary, as what grain is on the seven-foot carrier will be through the threshing machine before the horses can be stopped. The belt

tightener, same as used on No. 8, is provided. The No. 8 is made for 24- to 40-inch cylinders inclusive. The No. 9 is made for 18- to 28-inch cylinders, inclusive.

derrick wagon, affords a most economical means of handling this kind of grain.

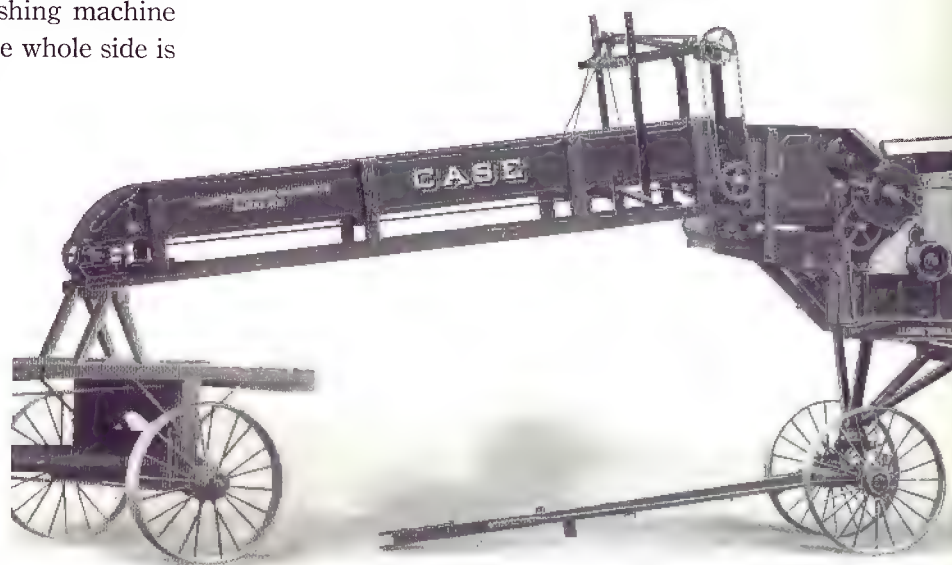
The grain ricks are about 100 feet long, and in groups of four — two on each side of a track wide enough to permit the derrick wagon to be driven between them. The derrick wagon consists of a platform about 14 x 20 feet, mounted on low trucks, and supporting a derrick to carry the rope sheaves for the fork cables, which are usually  $\frac{3}{8}$ -inch in diameter by 120 feet long. Four derrick blocks are used, two forks and two teams being required for a steam outfit. The end of the side carrier of the feeder rests on the derrick wagon, the threshing machine being set alongside of the stacks, so that the whole side is free for taking away the threshed grain.

Where the grain is threshed directly from the headers, without stacking, the end of the long carrier is usually placed on the ground, over which a canvas is spread. If the derrick is used it is so arranged that the cable hooks to a net which is spread in the header wagon boxes before they are filled and dumps the grain out of the nets into the feeder carrier. Often, however, the header wagon drivers pitch the headings into the canvas spread on the ground.

Case Spokane Feeders are built of



No. 8 Feeder and 24-foot Side Carrier

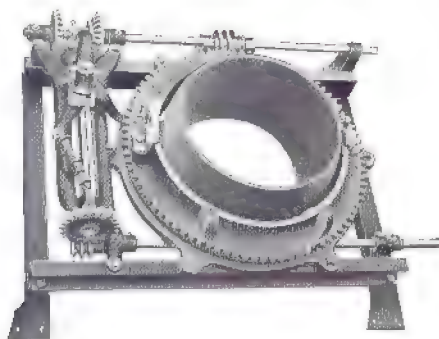


No. 9 Feeder

Prices quoted on pages 91 and 92

## Case Gearless Wind Stacker

**S**IMPLICITY, absolute certainty of doing perfect work under all reasonable conditions, combined with durability, describe the Case Gearless Wind Stacker. This stacker consists only of a large steel hopper, built on an angle of about fifty degrees, which receives the straw from the straw rack; the fan and housing which receives and drives the straw into the chute and onto the stack. It is one of the simplest and most efficient wind stackers ever built.



Turret for Gearless Wind Stacker

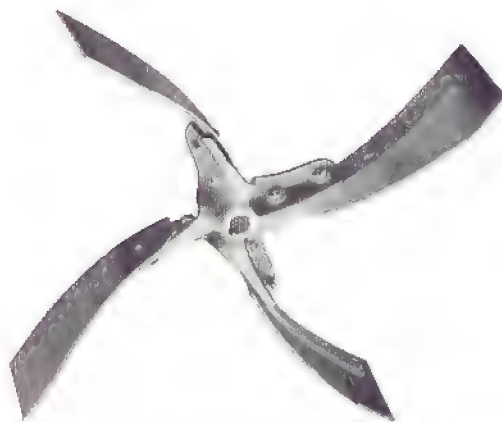
The telescoping device is positive in action, and will keep the chute extended without regard to angle of elevation. From the conveniently located foot-board the operator commands a good view of the stack at all stages of the work. This illustration shows extreme height to which chute may be raised—about 25 feet. This gives it capacity for elevating straw to the largest stacks without resetting the threshing machine.

The hopper and housing of fan are made of extra heavy sheet steel. The fan is made of a combination of metals which have been found by exhaustive tests in our laboratory, and practical use in the field, to be the best adapted for strength and durability.

Because of its simplicity it takes very little power to run this stacker. It is driven with a straight belt direct from the cylinder. To insure even running and to save time in adjustment of driving belt, we have recently added a very efficient belt tightener.

There are openings on either side of the wind stacker, one above the hopper, as shown in cut, and the other on the opposite side of the machine which makes the sieves and interior of hopper easy of access.

The turret has been improved. Heretofore there has been some inconvenience on the old-style turret on account of the necessity of removing trip pins when

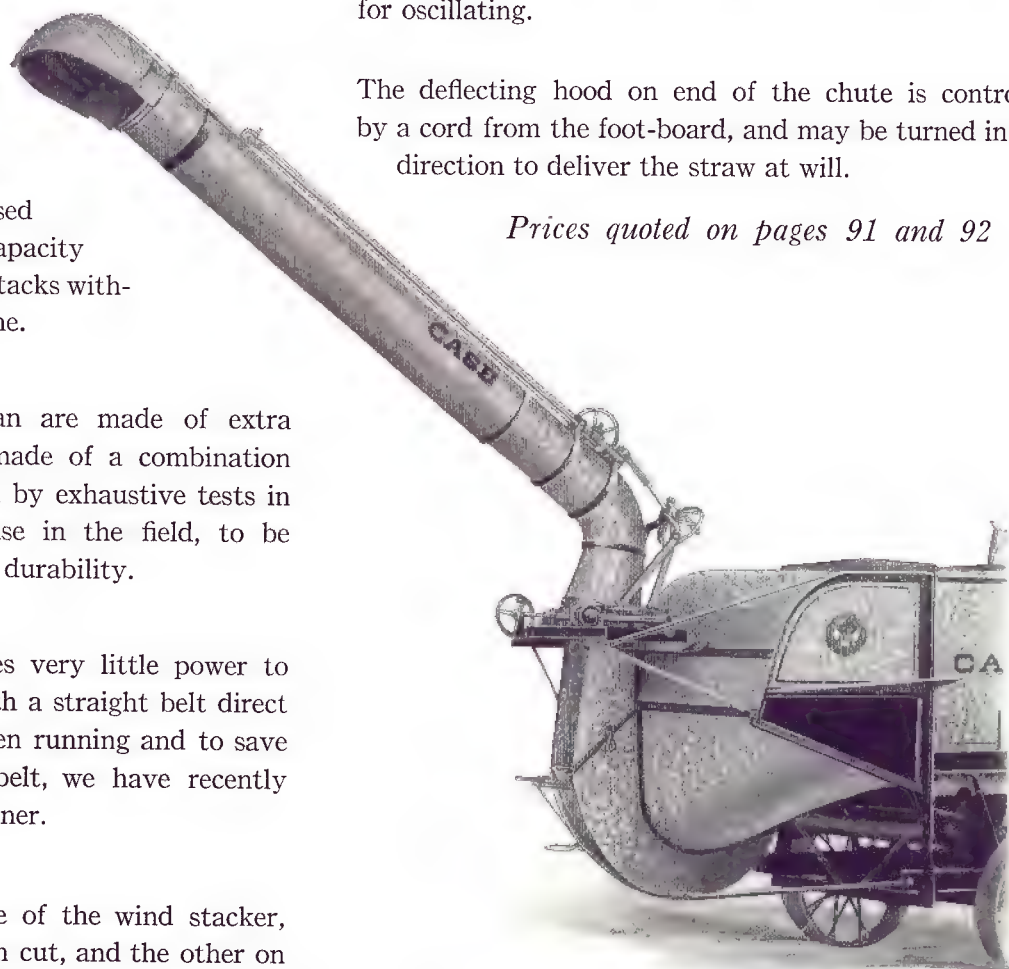


Gearless Wind Stacker Fan

being operated by hand. With our new patented trip mechanism it is only necessary to throw over the latch when it is desired to change from hand to belt power for oscillating.

The deflecting hood on end of the chute is controlled by a cord from the foot-board, and may be turned in any direction to deliver the straw at will.

*Prices quoted on pages 91 and 92*



Case Gearless Wind Stacker



## The Case-Sattley Attached Stacker

OUR Attached Stacker, which is built under the Sattley Stacker Company's patents, is shown on this page, attached to a steel machine, with the carrier elevated. On page 57 it is shown with the carrier folded on top of threshing machine. The upright section is hinged to the lower end and is raised or lowered by means of the screw support on top of the threshing machine. Thus, besides being a great advantage in operating, its flexibility throws less strain on the threshing machine and stacker than if it were rigid, and therefore adds to the durability of both. On the folding device, ropes and chains are eliminated, and the stacker can be held in any position without danger of falling.

It is always locked in position, and the slipping of a dog will not cause it to fall. The crank for folding it is at the right height for the operator standing on the ground. The folding device is also the raising device, and is the simplest and safest of any similar mechanism made.

The main rake passes only through the upright and outer sections, and runs loosely, and as easily as on a straight stacker of the same length. There are pulleys at the top of the upright section as well as the bottom, and all of them are drivers. The sheet-iron straw guard prevents the straw, as it leaves the machine, from being scattered by the wind. It is fitted with canvas curtains around the lower edge, which prevent littering, even with a strong side wind.

The automatic swinging device has been used by us for years. By changing the position of the trip pins the stacker can be made to swing in any desired part of the half circle, irrespective of elevation. The drive is from the threshing machine cylinder, and the belt runs free of all parts of the threshing machine or stacker without the use of idlers or guides.

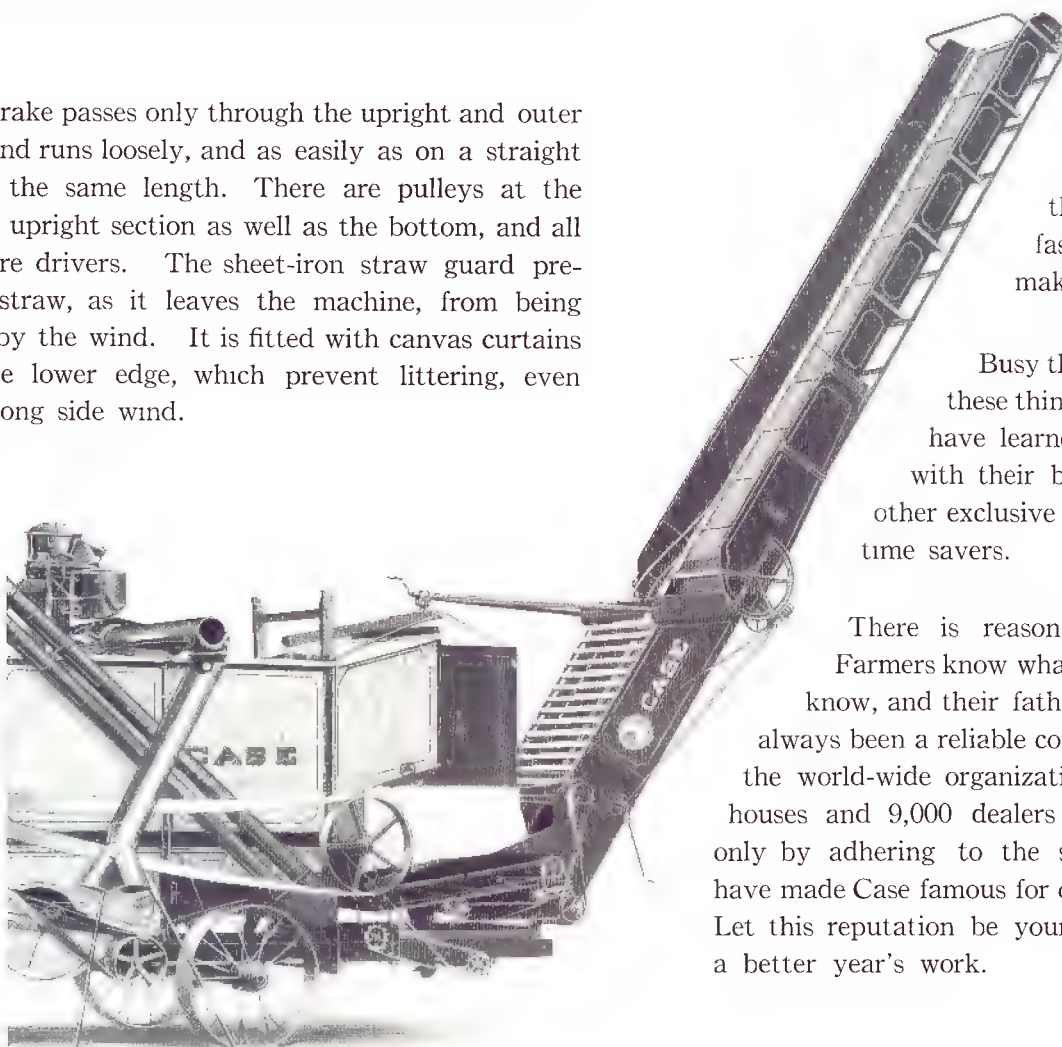
### Common Folding Stackers

Common Stackers will be furnished in 18-, 22-, and 24-foot lengths, to go with any size Case Threshing Machine except the 36-inch, which is furnished in a 16-foot length only. These stackers for 20-bar threshing machines are provided with a convenient folding device worked from the ground. In moving, outer section folds over.

You should make your investment in a threshing machine that will pay you good dividends. The man who does the cleanest threshing, who does the fastest work, is the one to make his work pay him well.

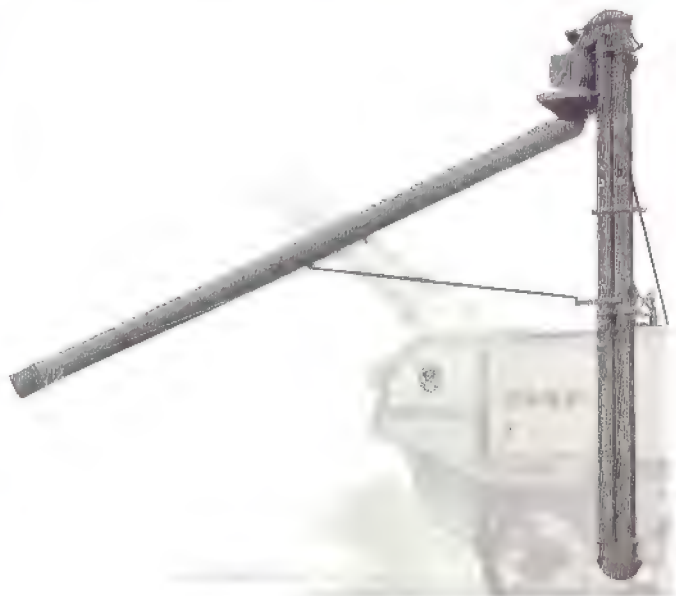
Busy threshermen, men who do these things, are Case users. They have learned that Case machines, with their big cylinders and many other exclusive features, are money and time savers.

There is reason for Case leadership. Farmers know what Case stands for. They know, and their fathers knew, that Case has always been a reliable concern. They know that the world-wide organization of forty-four branch houses and 9,000 dealers have been established only by adhering to the sterling principles that have made Case famous for over seventy-four years. Let this reputation be your guide. It will mean a better year's work.



Stacker Drive and Elevation of Carrier

Prices quoted on pages 91 and 92



No. 2 Automatic Grain Register



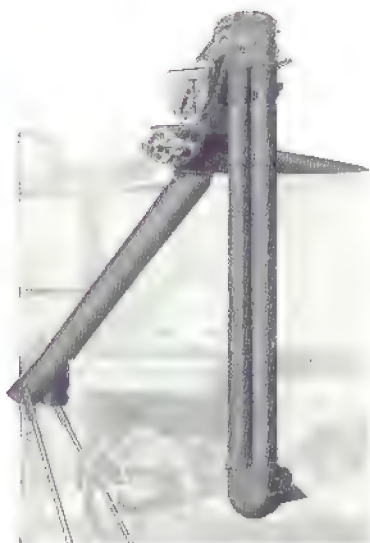
No. 5 Loader

## Case Grain Handlers

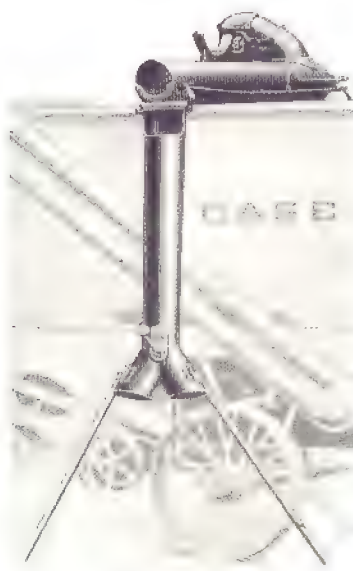
OUR regular Automatic Grain Register No. 1 is much lower in height than any other Automatic Grain Register and is not folded in moving. It is furnished with a conveyor to deliver grain on either side of machine, and with a pair of short wagon spouts or bagging device. Wagon spouts are furnished, unless otherwise ordered. Dakota Automatic Grain Register No. 2 is used where field threshing is the rule. Some threshermen prefer an attachment having a high elevator to permit the use of the long spout, which swings over the machine to deliver the grain directly into the wagons. The mechanism is the same as the No. 1. Short Bagger No. 4 delivers the grain in sacks on the ground, and keeps an automatic count of sacks. High Loader No. 5 is similar to Dakota No. 2, less

the weighing device, and can be used as a bagger if desired. Elevator and spout are easily folded like No. 2, without the use of tools. Low Loader No. 6 is suitable for delivering the grain into wagon boxes. It has a short spout and conveyor across the machine, which delivers the grain at either side, but not the weighing or tallying mechanism. It will be furnished with wagon spouts unless otherwise ordered. In Canada these Registers are purchased with an independent, duly verified scale steel-yard of not less than 100 lbs. capacity or with two duly verified measures of capacity of one-half and one bushel each respectively, in accordance with Section 33 of the Weights and Measures Act, Chap. 52, R. S. 1906, of the Government of the Dominion of Canada

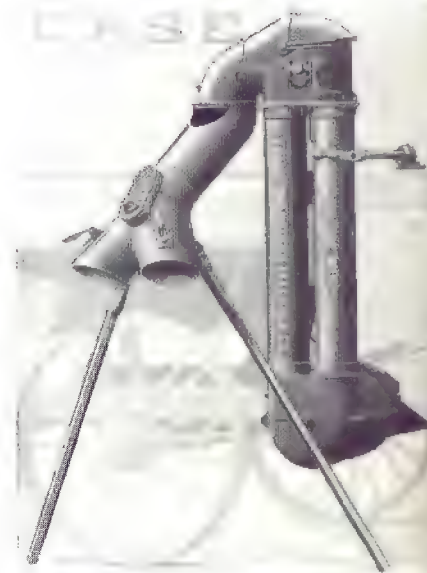
*Prices quoted on pages 91 and 92*



No. 1 Automatic Grain Register



No. 6 Loader with bagging attachment



No. 4 Bagger



## Case Clover-Hulling Attachment

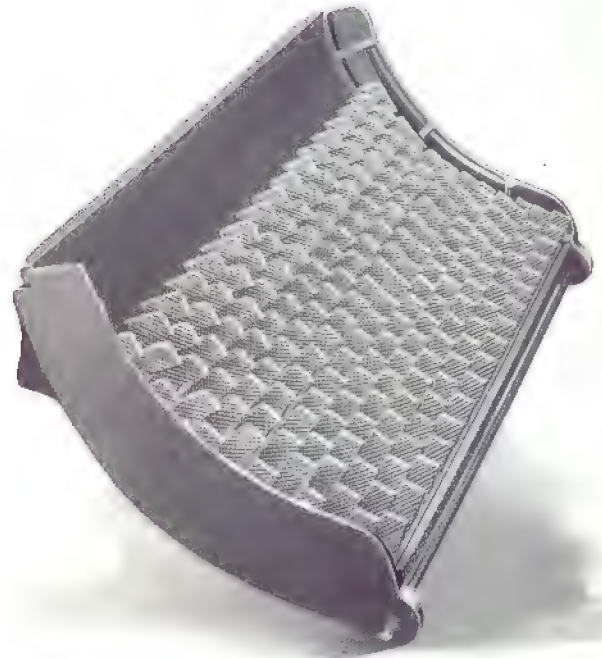
WE would not tell buyers of Case Threshing Machines that they, with the proper attachments and adjustments, could successfully hull clover if we did not know it to be a fact—we could not afford to. Every year there are hundreds of our machines regularly employed in this work, and the scores of letters we receive from experienced threshermen prove that our machine does the work as quickly and thoroughly as any clover huller on the market. This being true, what is the use of buying an exclusive Clover Huller when you can buy a Case Threshing Machine, run it part of the season in threshing wheat and other grains, and the balance of the season hulling clover and alfalfa. A number of our customers claim they can hull twice the amount of clover with the Case Threshing Machine, fitted with our special rasp concave teeth, as can be hulled by any of the best clover hullers, and without any more waste.

Following is list of Clover-Hulling Attachments, with prices of same. They consist of four filled concaves, one blank, two concave circles, and sieve.

For 18-in. Cyl. Machine, \$25.00; for 24-in. Cyl. Machine, \$30.00;  
for 28-in. Cyl. Machine, \$35.00; for 32-in. Cyl. Machine, \$40.00;  
for 36-in. Cyl. Machine, \$43.00; for 40 in. Cyl. Machine, \$46.00;  
for 44-in. Cyl. Machine, \$50.00.

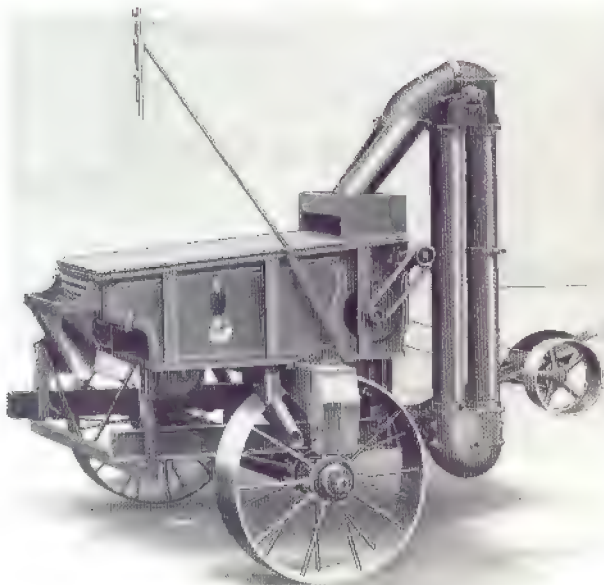
In ordering state diameter and width of cylinder, and width of rear of Threshing Machine.

*Clover Recleaner.* Under ordinary conditions clover can be successfully cleaned by the special concaves with sieve adjustments, but where weeds are present in quantity we advise the use of our Recleaner, which we



Clover Attachment

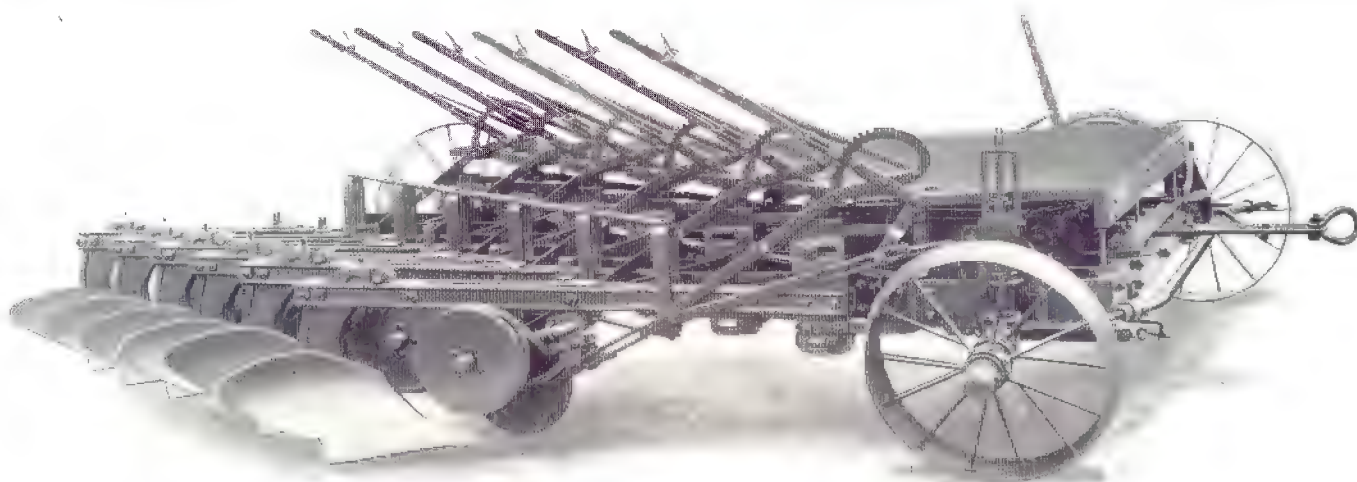
here show attached to the machine. When the threshing machine is fitted with a No. 1 Weigher or No. 6 Loader, it is unnecessary to purchase a new elevator for the Recleaner, as the spout furnished is all that is required to conduct the seed from the regular grain elevator. When the machine is fitted with a No. 4 Bagger, extension elevator pipes must be used so as to elevate the seed high enough to be dumped into the re-cleaner hopper. On machines having other grain elevators, or none at all, the special elevator shown in the left-hand cut must be used. The Case Clover Recleaner is fitted with a number of sieves for cleaning the various varieties of clover and alfalfa seed. Although the attachment is very compact it has a large capacity for handling these seeds. Alfalfa sieves for the Clover Recleaner furnished for \$1.50 each additional.



Threshing Machine with Clover Recleaner and Special Elevator



Threshing Machine Fitted with Clover Recleaner and No. 1 Automatic Grain Register



## Old Abe Tractor Gang Plows

*WARNING: We want the public to understand that our plows are NOT the Case plows made by The J. I. Case Plow Works.*

*All correspondence concerning our plows should be plainly addressed to J. I. Case Threshing Machine Company.*

**M**AYBE you saw one of the many plowing demonstrations held in the various parts of the country during the last summer. If so, you were probably impressed by the fact that tractor plowing does not simply mean hitching a plow behind a tractor and starting off, but it means that the plow must be especially designed and built as an integral part of the plowing unit, which consists of the tractor and the plow.

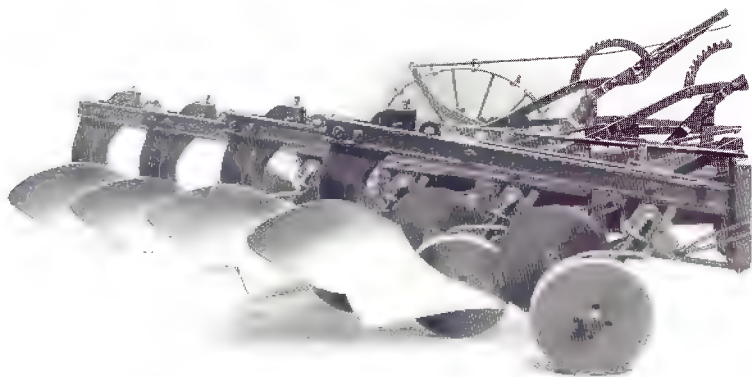
Tractor plowing, without any question, is going to be one of the biggest features in increased crop production, for the simple reason that it allows the farmer to plow deeper, which is necessary. Most farmers to date have

been using the same ground year after year. Now they will have to get down deeper. And second, it allows you to do your plowing faster, and so get your seed in quicker. These, however, are only two of the many reasons.

Old Abe Tractor Gangs have been designed and built by men who know the plowing needs from the point of view of the farmer. These plows have been built especially for tractor work. We know from field work those parts that must be strong, and those that can be lightened. Read on in the following pages, and you will find exclusive features in these plows which will convince you of the fact that no other tractor gang is so well made.







Side View of Old Abe—Note the height to which bottoms are raised

### *Frame*

In the frame of this Tractor Gang Plow those structural sections which carry the weight of the operating parts, and to which the levers are fastened, are made of extra heavy channel steel. The material and size of these sections is the direct result of tests in the field under the most trying circumstances, in order to be sure of their strength. The result is a structure which carries in perfect alinement the various parts of the machine. There is no possibility of the frames warping or being twisted.

### *Levers*

Note that the levers are mounted on the frame and not on the beams. They are connected to the gauge wheel in such a manner that this wheel, in passing over an obstruction, raises the plow only high enough to clear the obstacle. If the levers were attached directly to the beam and gauge wheel, the bottom would rise higher than necessary, and thus take more time in getting back into the ground, leaving unplowed a piece beyond the obstacle. Then, too, the depth of the furrow, therefore, is more even with this arrangement.

### *Wheels*

The frame is mounted on three wheels. The two forward wheels are mounted on pivotal axles and are controlled by the hitch. The draw-bar on the plow has two lugs that are held solid against the frame when going forward and locks the wheels rigidly in line, allowing the engine to vary its course considerably without pulling the wheel out of the furrow. The front furrow wheel has a wide oval face tire which keeps the furrow and insures an even cut for the first plow and is provided with a screw for leveling the Plow.

### *Beams*

The beams of this plow are made of high carbon steel, with double channel sections tied together, which enables them to resist all side pressure of the plow bottom, allow-

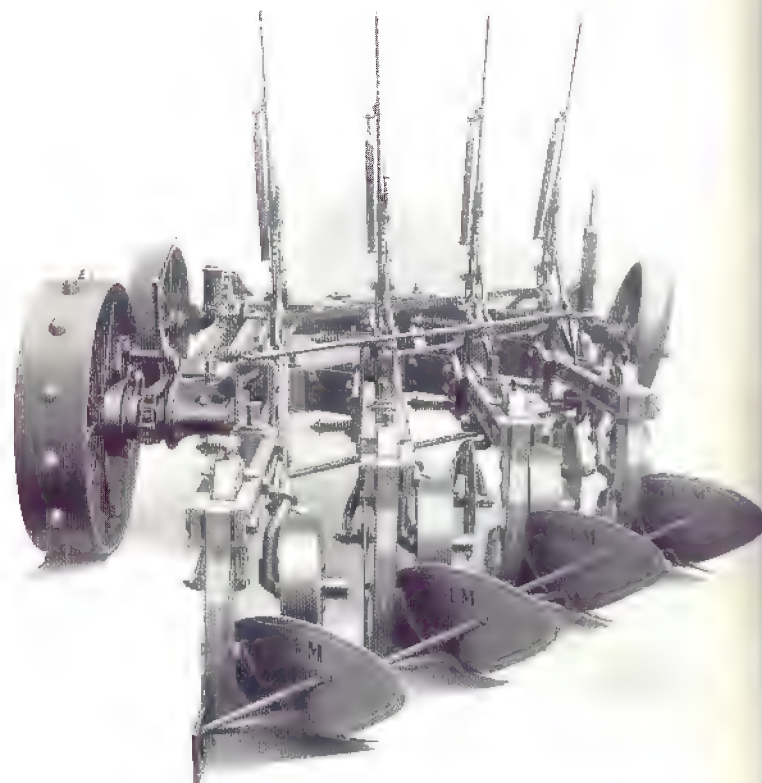
ing no chance for torsion or getting out of line of the plow bottom. Every beam is reinforced with a large rigid loop or yoke. The height of the beams from the ground prevents any clogging, even in extreme conditions.

### *Beam Hitch*

In our design, as you will see in the illustration on page 79, the point where the spring is attached to our beam coupling is extremely low. This is done so that the plow will penetrate the ground at the proper depth. In other plows they rely on the weight of the plow and the suck of the share to accomplish this. This beam hitch tends to keep the plow in the ground at the proper distance with the proper cut.

### *The Spring Hitch and Automatic Dodge*

Each plow is drawn by a powerful spring (A) attached to the rigid frame. The strength of this spring is many times greater than is necessary to draw the plow in the heaviest soil, but when the point of the share hits a stone or obstruction, the spring yields and absorbs the shock which otherwise would injure the beam. The illustration shows that the plow beam is bolted to a very long, broad plate, which operates against a similar plate bolted to the rear of the plow frame. Note the slotted connections (B) at top and bottom. This permits the plow itself to advance five or six inches while the bottom is held by the obstruction. The moment the bottom is held the gauge wheel is automatically cranked forward and down, thus



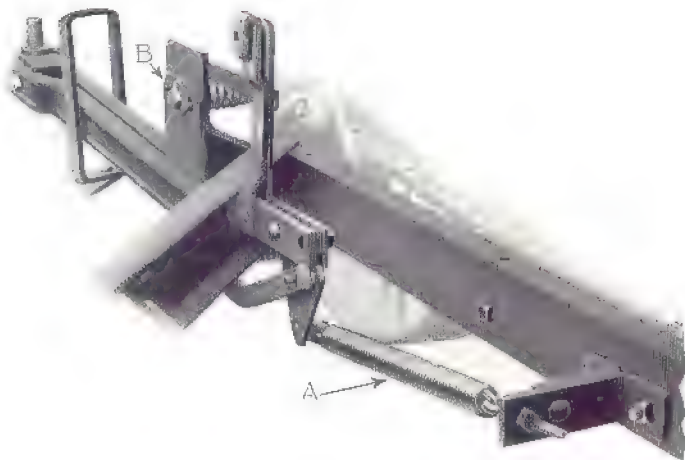
The Heavy Beam Construction and Large Wheels are features of the Old Abe

raising the bottom enough to clear the obstruction. As soon as the obstacle is passed the tension on the spring releases and the bottom resumes its work.

This spring hitch holds the plow bottom rigid and true to the line of travel. The coupling construction found in other makes eventually becomes worn, and allows more or less play at this vital point; the result is the bottom is not held tightly and runs out of line.

### *Side Tension Spring*

This device, shown at "C" in the illustration relieves all side strain on the beam. It is arranged to keep the two face plates (D) in rigid contact, but when the bottom strikes the obstruction at an angle, the spring releases sufficiently to allow the bottom to be forced to one side without injury; that is, the side pressure is absorbed by the spring instead of by the beam or share, which would probably result in damaging either one. When the obstruction is passed, and the pressure is relieved, the

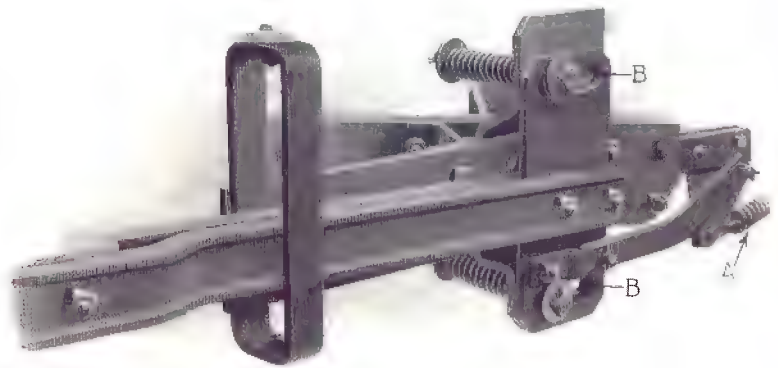


Spring Hitch

spring forces the plow back to its proper place. The combination of the spring hitch, the automatic dodge, and the side tension spring are features which you must not overlook because they guarantee the extension of the life of your machine, and therefore reduce proportionately its purchase price.

### *Cast Break Pin*

The cast break pin construction is one of those features which makes our tractor gangs so valuable to the man who figures his time in plowing. It prevents the possibility of injury to the bottom, because should the plow point become wedged under a rock or root, making it impossible for the dodging devices to work, the pin breaks under the strain. The cast pin is used instead of the wooden pin generally found because it does not crush or change its shape, thus allowing the bottom to run loose. The

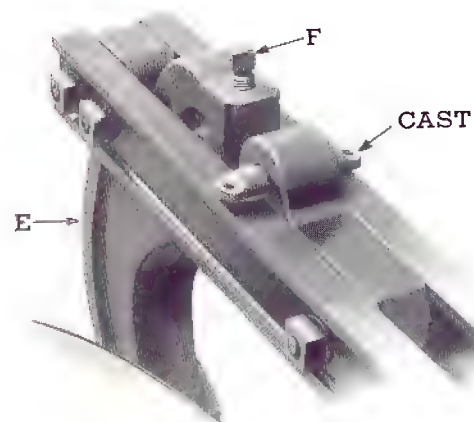


Spring Dodge

pin is grooved on either side of the block so when the break comes the center section of the pin shears off without wedging, as would happen with a straight pin, which would invariably break in the center. The tensile strength of this pin will resist 3500 pounds at the point of the share.

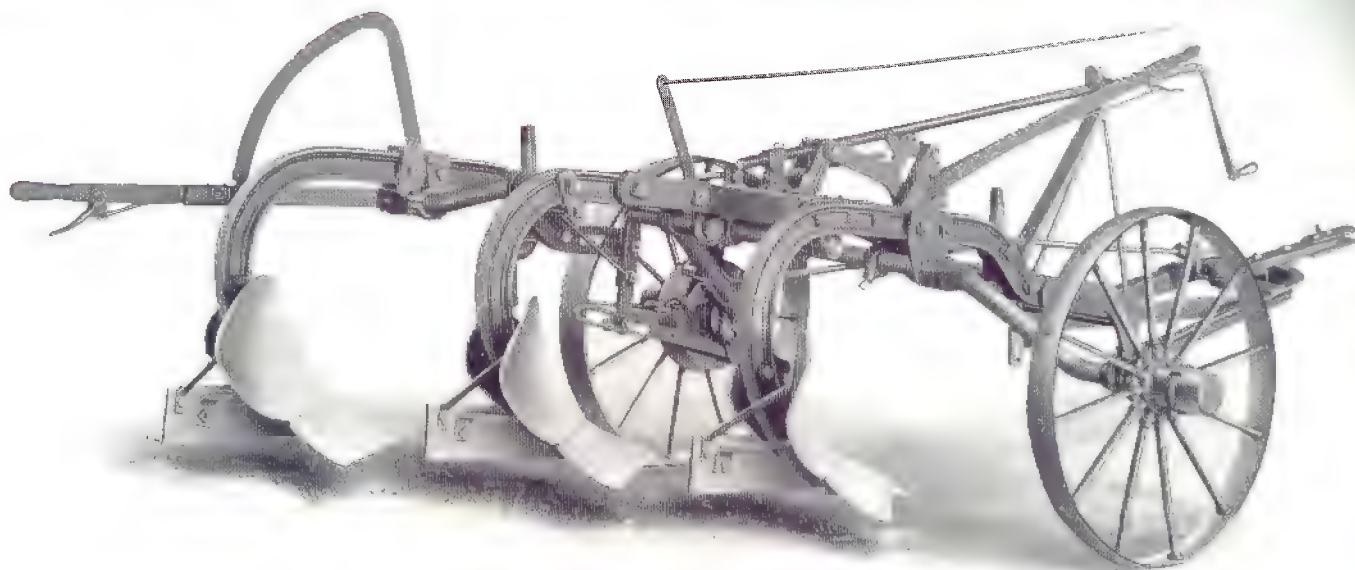
Note the heavy cast standard (E) in the illustration, which is pivoted on a very heavy pin bolt and is equipped with a screw adjustment, by means of which the suck of the bottom can be adjusted. The adjusting screw works on a heavy cast block, to provide for turning over the plow bottom when necessary without disturbing the adjustment of the bottom.

Covering the "Old Abe" Tractor Gang Plows, including the 2-3 bottom gang, described on the following page, we have prepared a special catalog which illustrates those points in design and construction which we believe are of especial significance to the plow user. Copy of this catalog, which contains some very interesting information to the power plow man, will be sent immediately on receipt of your request. Please remember that all correspondence concerning "Old Abe" Plows should be plainly addressed to the J. I. Case Threshing Machine Company.



Break Pin Construction





Old Abe 2-3-Bottom Tractor Gang Plow—Note the height to which bottoms are raised

## Old Abe 2-3-Bottom Tractor Gang Plow

**WARNING.** We want the public to understand that our plows are NOT the Case plows made by The J. I. Case Plow Works. All correspondence concerning our plows should be plainly addressed to J. I. Case Threshing Machine Company.

**I**N this plow you will find one designed and built especially to be used with a Case 10-20 Gas Tractor. The problem of a small-unit plow is a comparatively new one, and in offering you this plow we believe that we have the one which best suits the requirements. Let us point out to you right here a few of the features that make this plow valuable. We cannot describe it in detail, as we have not room. We shall be very glad, however, to give you minute descriptions of it if you will ask for our special plow literature.

Beginning with the general design of this plow, you will notice that it is built sturdily throughout. For instance, the beams are exceptionally strong, and the heavy, flat iron braces between the first and second beam, together with the bracings of the curves of the beams, mean extra strength. The shaft which braces the second and third beams is so designed as to hold the bottoms in proper position. The axles are  $1\frac{3}{4}$  inches in diameter; the hitch is unusually strong, with only one bolt to remove

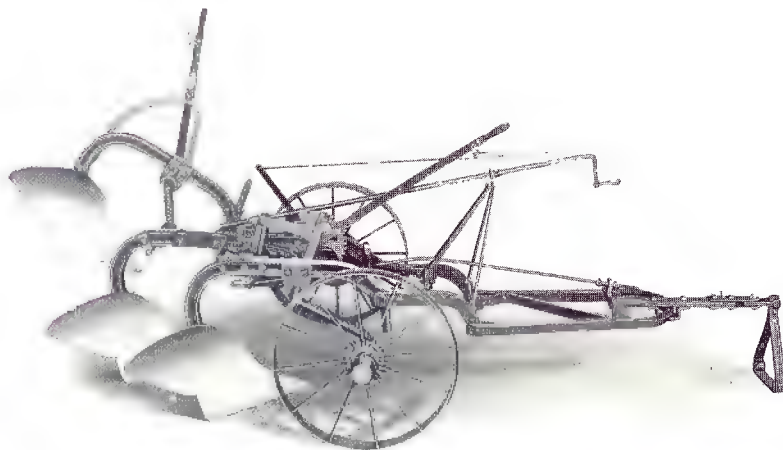
in adjusting. And so, all the way through, you find the very best material and construction. This can be proved by the weight of this plow. The weight is absolutely necessary, and bear in mind right here that weight has little, if anything, to do with the draft of the plow. We made a series of tests at the factory. This was one point determined, that a light plow does not necessarily pull lighter than a heavy plow, nor a heavy plow necessarily pull heavier than a light plow. In some instances just the reverse was the case; the light plow pulled heavy, and the heavy plow pulled light.

Remember in connection with this plow, that the third bottom is arranged so that it can be lifted and the plow used as a two-bottom plow. In no other plow is this feature found. Think of what this means. You do not have to stop to detach a beam. If you are plowing in heavy stuff, you can plow the same depth with two, instead of much more shallow with three, which would be poor plowing. Also remember, please, that the clutch of this plow allows you, should you strike a soft spot, to pull a string which releases the strain, lifting the plows gently over the heavy spot. This is a great feature in keeping the plowman from getting stuck.

Then, too, we want to call your attention to the distance between the underside of the beam to the share, and the clearance between the beam and the top of moldboard, in case you should want this plow for occasional trash plowing.

Then, too, remember that this is a two-wheeled plow. It can be backed any distance — and its adjustments are most simple. Also bear in mind the height to which the bottoms can be raised in traveling over the road.

For general-purpose work we believe that there is no other plow that has the advantages and all-around excellence of this Old Abe plow.



This plow is just the thing for your "10-20" Gas Tractor

## Four-Wheel Steel Engine Tender

THIS tank is designed to be used with a Case Threshing or a Case Road-Building Outfit. The fuel hopper is of generous size, with room at the back for the pump and manhole. The hopper sides are of steel, with three braces on each side. These braces are securely riveted to the tender and their lower ends are curved upward to make a convenient place for carrying the suction hose on one side, and the slip tongue, etc., on the other. Its water capacity is 12 barrels, or 382 gallons. We also make a 16-barrel tank, with a capacity of 512 gallons. No. 12 gauge steel is used, which guarantees its maximum life. Steel splash plates are riveted inside to prevent the water from rushing from end to end in starting, or in passing over rough roads. The Case pump has a capacity of two barrels a minute, and is easily worked by one man. The price of the tender does not include the pump and hose. The equipment for this pump consists of twenty feet of suction hose with strainer, and ten feet of one-inch discharge hose, with nozzle and couplings.

Price — 16-barrel tank, with trucks only \$110.00  
 12-barrel, with trucks only . . . 100.00  
 F. O. B. Racine, Wisconsin

These tenders can also be purchased unmounted. They are made so they can be set on an ordinary farm wagon and used for spraying, watering stock, gardens or lawns. They are regularly furnished with 38- or 42-inch bolsters.

### *Sprinkling Attachment*

The sprinkling attachment allows this tender to be used in building macadam streets and roads or for general street sprinkling purposes. The wide tires are used so as not to cut into the unfinished surface of the pavement. With the tank, pump and hose, the tank can be

filled from streams or any convenient source. The sprinkling attachment discharges the water in a sheet seven feet wide, and at the rate of a barrel a minute.



It is a very simple arrangement, and has always given the utmost satisfaction.

### *Gasoline Tender*

The Case gasoline tender is constructed of heavy galvanized sheet steel, thoroughly painted and varnished. All seams are carefully joined with tinned rivets closely placed, and soldered to insure perfect, leak-proof joints. The rivet heads on the inside of the tank are also soldered. A funnel is built into the tank for convenience in filling. A plug which screws into funnel closes the tank tightly. For protection a cover is provided to keep out water and dust. Its contents are drawn from the tank by means of a valve located at the rear.

The capacity of this tank is 16 barrels. It is furnished for 38 or 42-inch bolsters.

The gasoline pump is made to attach easily to the tank, and to empty as well as to fill it. It has capacity of 50 gallons in three and one-half minutes. The price of this pump is \$8.50.

### *Case Steel-Wheel Trucks for Four-Wheel Engine Tender*

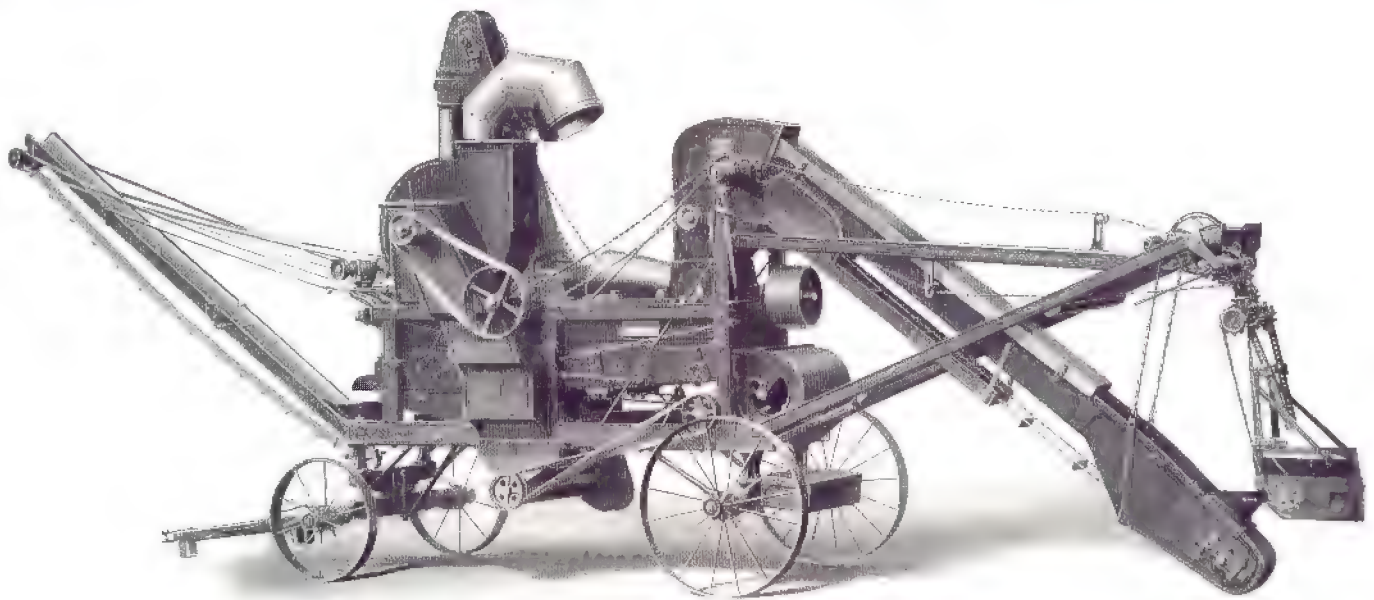
These trucks, while designed for the engine tender, are also intended to use separately, and will take the regular farm wagon box. They are constructed in genuine Case fashion, with front wheels thirty inches in diameter, and the rear wheels thirty-six. The hubs have a 12-inch skid bearing surface.



Gas Tender

Prices quoted on pages 91 and 92





## Case Corn Shellers

**I**N the Case Corn Sheller, we offer a machine that will prove a dividend-producer if added to your equipment. Many excellent features are built into this sheller. It is one which will make an instant appeal to the farmer who demands a good, efficient machine.

Take for instance the dust discharger, which is one of the features of this corn sheller. By means of a powerful suction fan, dust shucks and silks are collected from the sieves, and then conveyed through a steel elbow with a swivel joint to which is attached a heavy canvas spout eighteen feet long. By means of this device dust, shucks, and silks can be conveyed to the ground at any point desired.

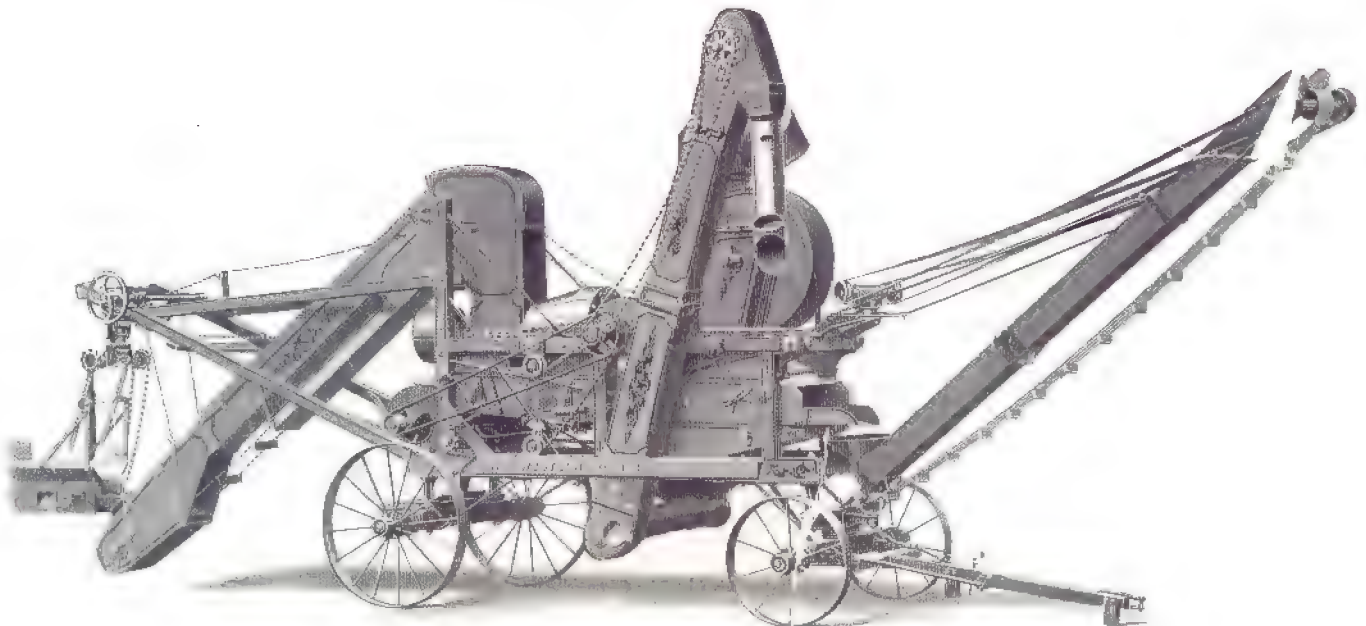
Another feature of this sheller is the adjusting lever which enables the operator to adjust the cylinder to all kinds of corn while the machine is in operation.

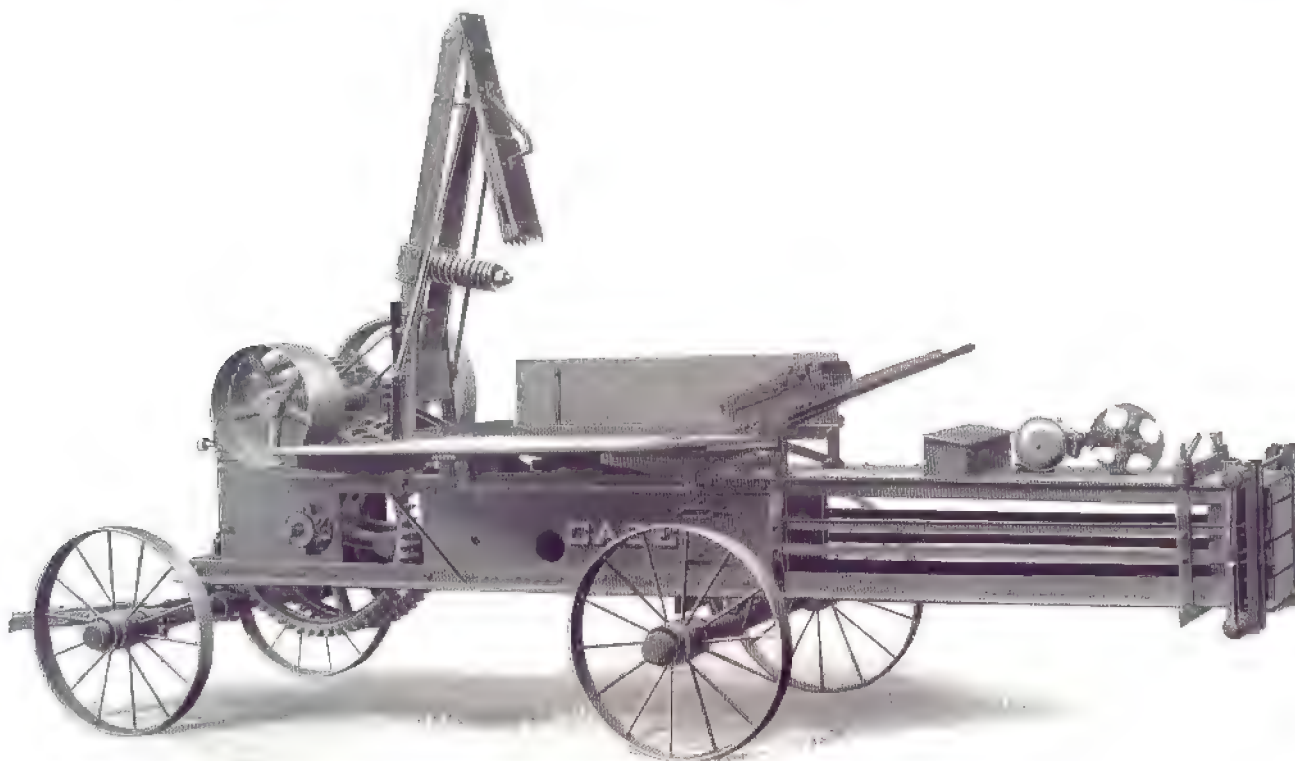
This Case Corn Sheller will enable you to keep your power going, when ordinarily it would be standing idle. Many farmers are reaping bigger profits by doing the husking and shelling for the farmers in their vicinity, with the Case Husker Shredder and Case Corn Sheller.

As no very great outlay is represented in a machine of this kind it should be on the farm of every farmer who wants to swell his income.

Descriptive matter on corn shellers will gladly be furnished on request.

*Prices quoted on pages 91 and 92*





## Case Baling Presses

ING presses each year find their way to thousands of farmers. And why? Because baled hay offers greatest profit. The city market insists on baled hay, because it is compact and fresh, and remains clean in its form. Besides, it can be stored in small space. It can be handled quickly and economically. No farm can be without the new Case Baling Press. They are hay-makers.

Balers are built in two sizes, 14 x 18 inches and 22 inches. The former has a capacity of 3 to 4 tons per hour, and the latter 3½ to 5 tons per hour. They are constructed entirely of the best steel, suited to its requirements, with the exception of the feeding table, which is of wood.

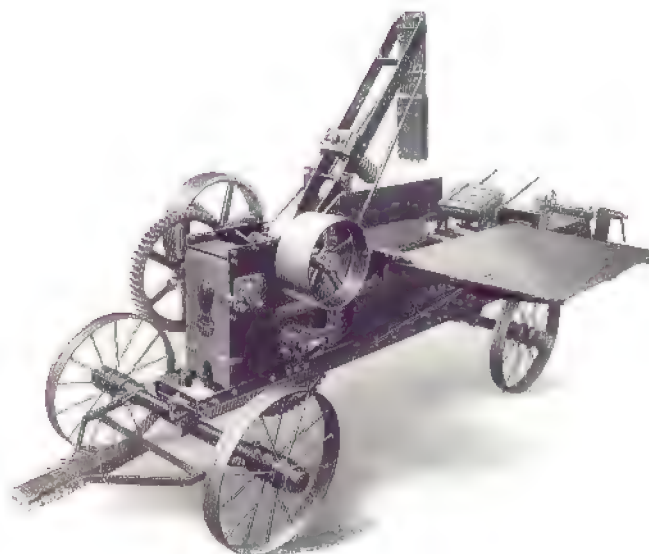
The frame is constructed of 3½ x 3½ x ⅜-inch angles, with ¼-inch plates, hot-riveted together. This keeps all parts permanently in line, and eliminates an endless amount of trouble caused by loose bolts.

Case Balers are equipped with top, bottom and spring side tensions, by which bales of any desired weight can be made.

The bearings of all gears are carried on a heavy steel plate which prevents gears from spreading or getting out of mesh.

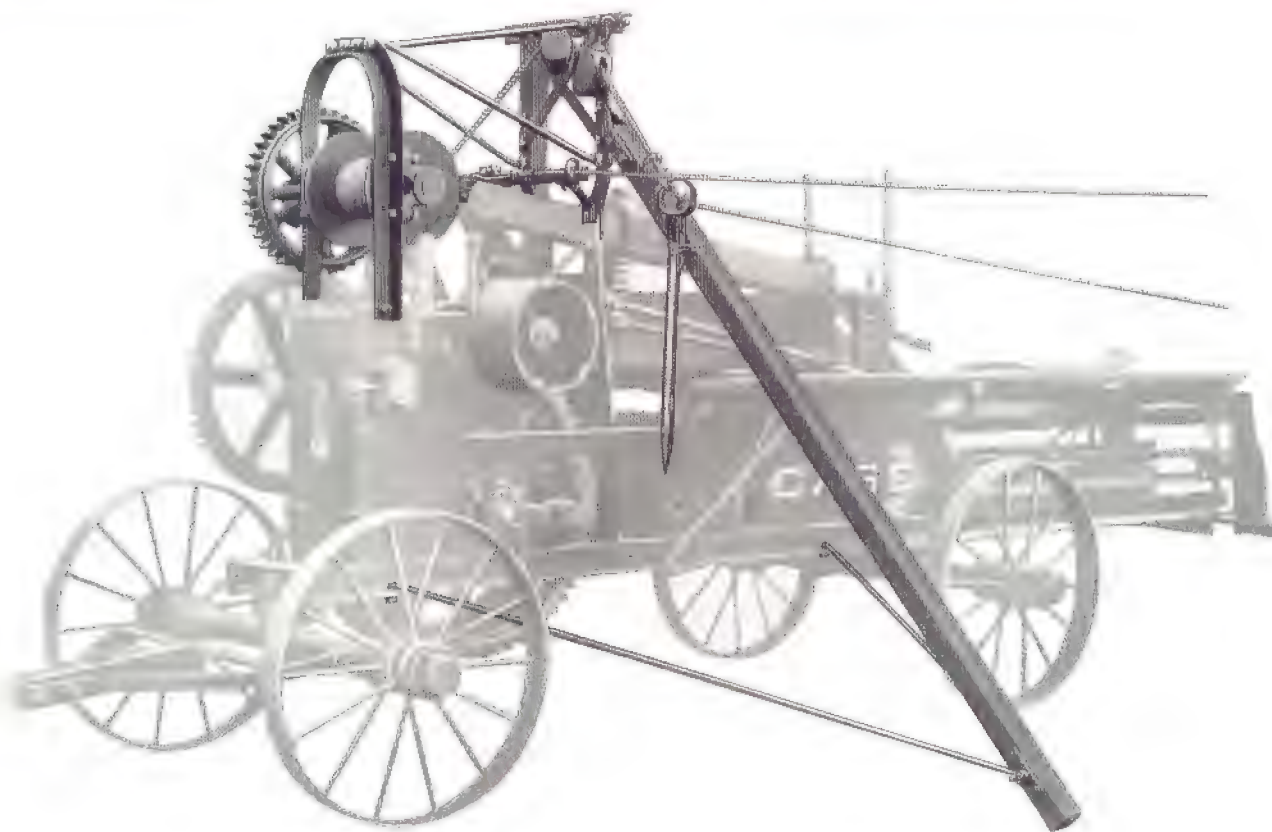
Openings are provided in the bale chambers to let out all chaff and seeds, and make clean-looking bales.

The feeding arrangement is another exclusive feature. The hopper is arranged with deep and long-flaring sides, which takes a large forkful of material. The feeder head comes straight down through the hopper into the bale chamber, and does not crowd the hay against the plunger or the folder. This is why Case Balers handle large feeds. Many other splendid features of Case Balers are explained in our new Catalog on Case Baling Presses. Send us your name and we'll send you your copy.



Case Belt Power Hay Press—Note Large Feed Opening





### *Case Hay Fork*

The hay fork is a labor saver, hence a money saver. This fork attachment does the work of two men, so you can readily appreciate its value. It consists of a Harpoon Fork and Winding Drum, with a cone clutch and operating gear. The entire mechanism can easily be attached to either the 14 x 18-inch or 17 x 22-inch Case Belt Power Baling Press. With this device, the baler is placed at one end of the stack until the entire job is completed. This device handles the hay in one operation against three by hand. Busy farmers appreciate this improvement, as it means increased production, and this in turn, means increased profit.

Isn't this wise economy?

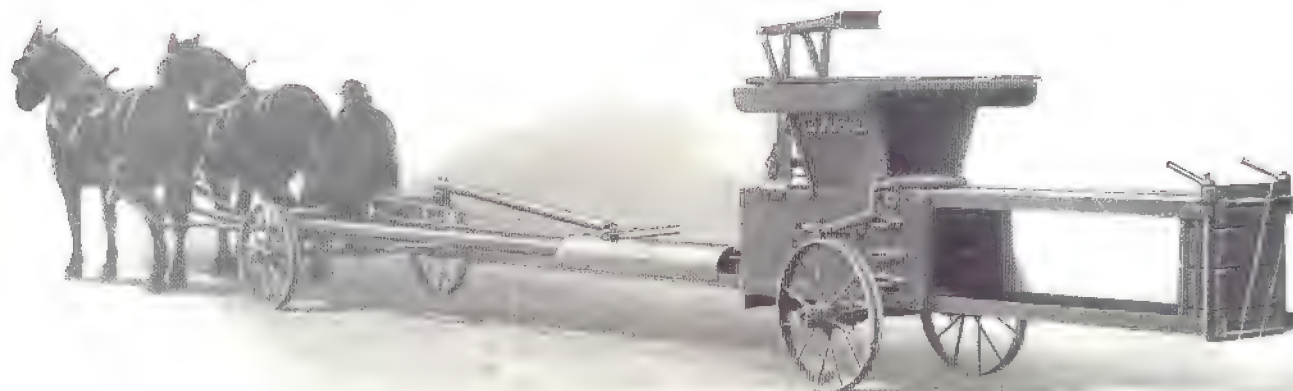
### *Case Sweep Power Baling Press*

Certainly, for increased profits, the baling press is a necessity. Every farmer should have one. The size of

your farm makes no difference. Here is one that can be used with excellent results on the smaller farm. Case Sweep Power Baling Press has a capacity of 1 ton per hour, and can be driven by one team. The feeder on this press puts 50 percent more hay in the machine than a man can, feeding with hand and foot. Whatever your needs, it makes no difference, this Press will prove itself a labor saver and a money saver for your farm. Its construction gives evidence of the care and skill with which we build.

In this limited space we cannot confine ourselves to many good details of Case Baling Presses. However, our request will bring you our special Baling Press Catalog. It explains point by point, the features of Case Baling Presses. It's free, and we send it postpaid. May we send you a copy?

*Prices quoted on pages 91 and 92*





## Case Road Machinery

of dollars spent yearly for American much is paid by you tax payers living by you and the man next door? And you know about road machinery and road rollers? How much of the dollar that you actually goes into the machines, and how else? If you will send for the Case Road Machinery, where our prices are given,

you will have a reference book at your elbow so when your county or township spends the money which you pay in taxes, you will have a guide on the prices of road machinery.

Case Road Machinery, remember, like all other Case machinery, is guaranteed to do anything that any other machine will do.

### *Points of Superiority of the Case Ten-Ton Roller*

ness and simplicity in construction.  
heel-base which allows short turning.  
economy in use of fuel and water.  
r tractive power — equal power is applied to both rear wheels, when traveling straight or in turning corners, by means of the spring differential gear. This spring differential also eases the gears by preventing shocks.  
differential gear is essential to a road roller. Would the user of any self-propelled vehicle be satisfied to have but one wheel drive, to dispense with this device, which is necessary in order to have both wheels drive?  
width of rolling surface, 7 feet 9 inches.  
boiler is not subjected to injurious strains from engine, rear wheels or transmission gearing.  
tubes can be cleaned with regular flue scraper in ten minutes.  
engine frame is similar in design and construction to the best stationary engines built.

Friction clutch for gradual application of power.

Power steering device (patented) — furnished without extra cost — is convenient, simple, and efficient. Operators actually accomplish more work with rollers fitted with this device than with hand-steered roller.

Front roll can be turned when machine is standing still.

Convertible into hauling engine.

Large and heavy flywheel makes it advantageous for all kinds of stationary work.

Greater fuel and water-carrying capacity than others.

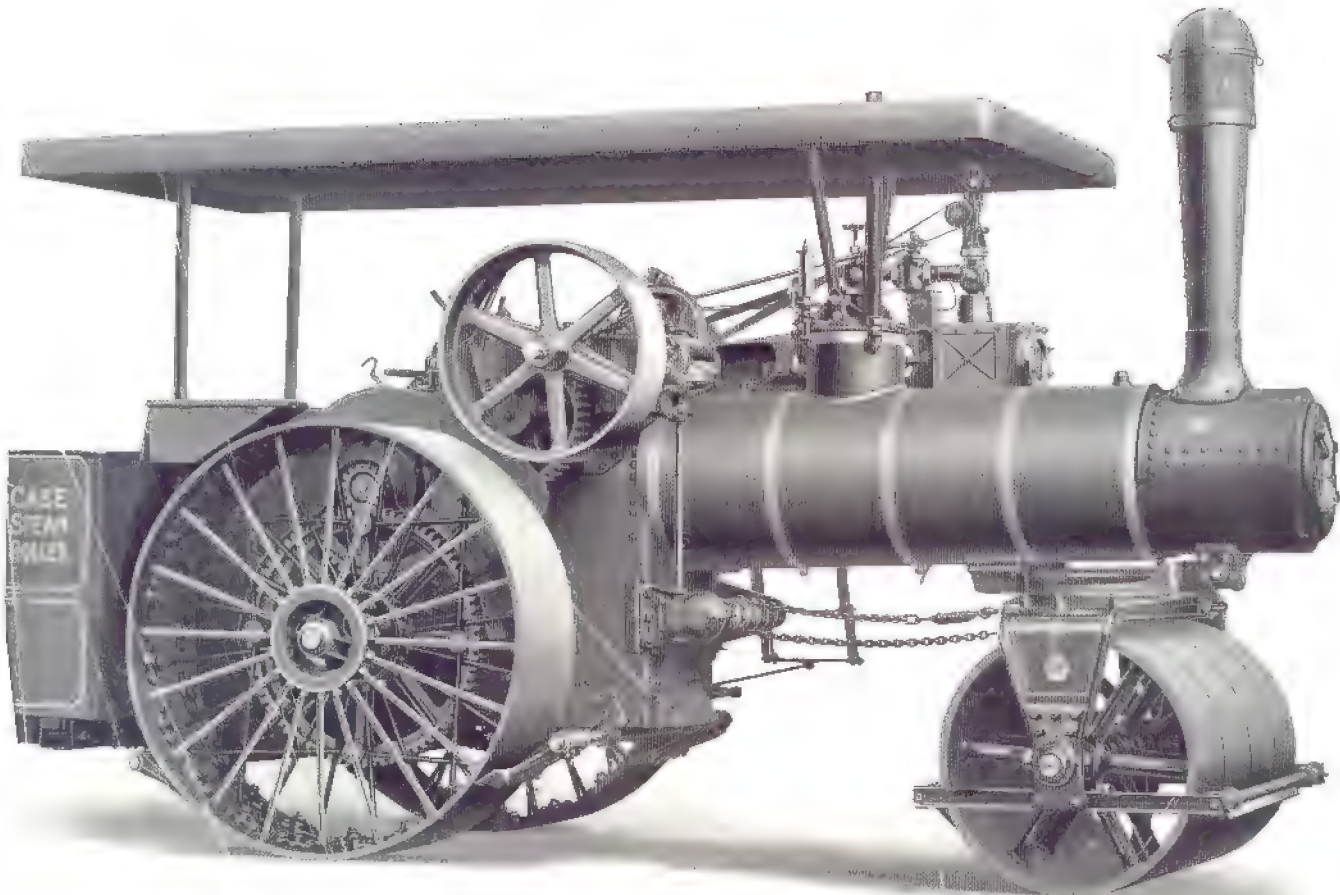
Spring mounting.

Spring cushioned gearing.

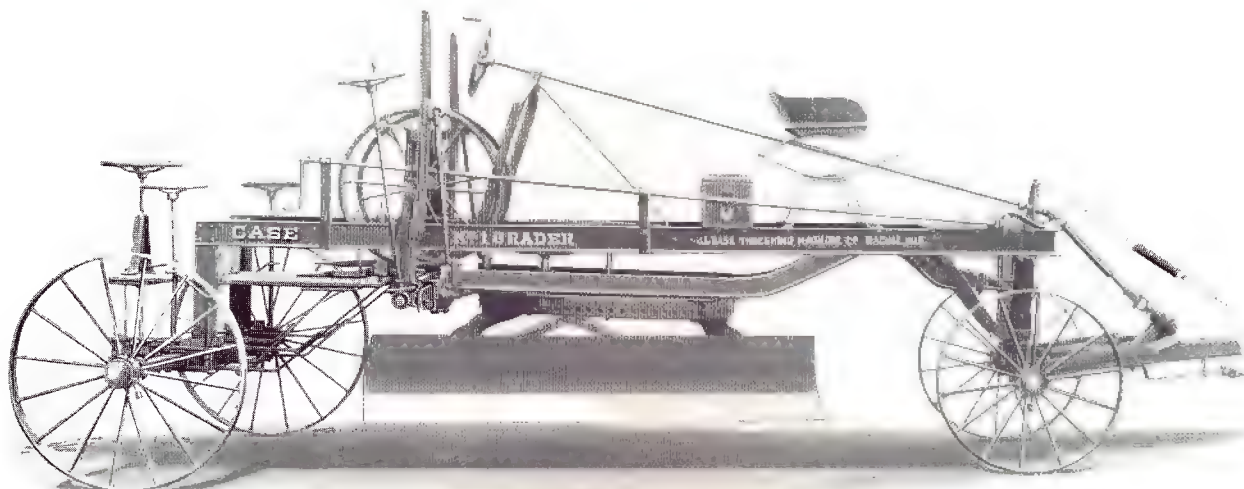
Ball bearing front bolster.

Scrapers are properly located on the rolls and are adjustable as to spring tension.

*Prices quoted on pages 91 and 92*







No. 1 Grader

## Case Graders

**T**HE Good Road movement is becoming more widespread each year. This is plainly evident. With the growth of this movement has come the demand for an efficient Grader, one upon which both contractor and municipality can rely. This is the reason for the popularity of Case Graders. They are efficient. They contain many exclusive features that mean increased production.

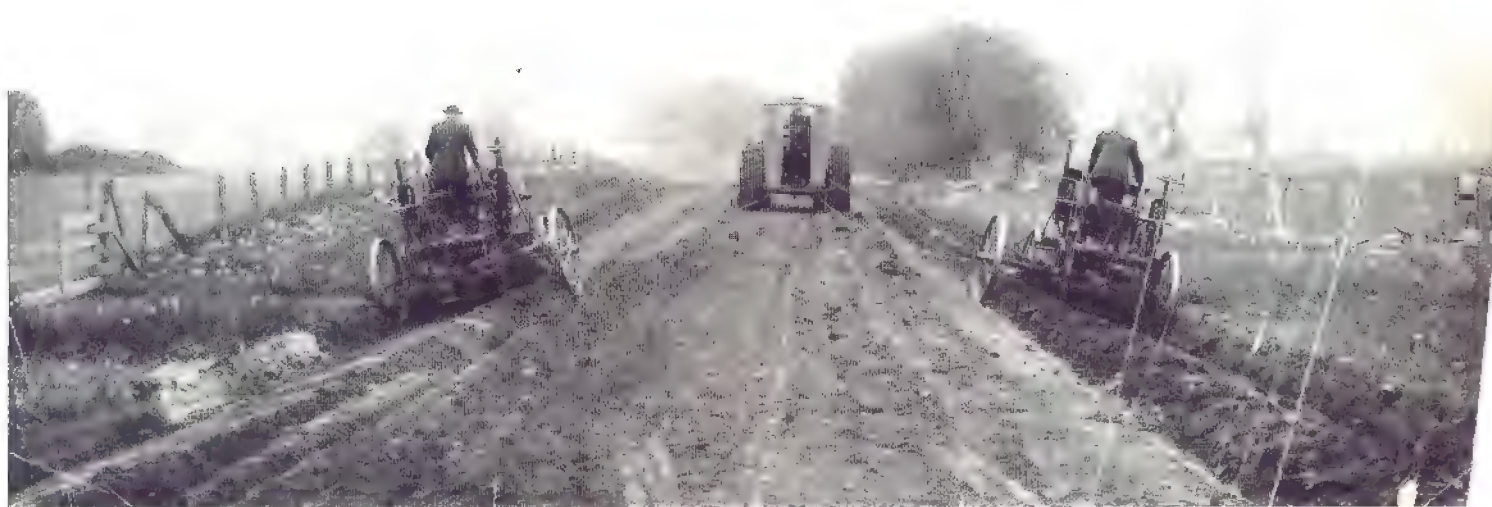
They are designed by road-building engineers — men who understand road-building problems. You are sure to find Case Graders wherever the Good Road movement prevails. Here are a few reasons why Case Graders are *making good*.

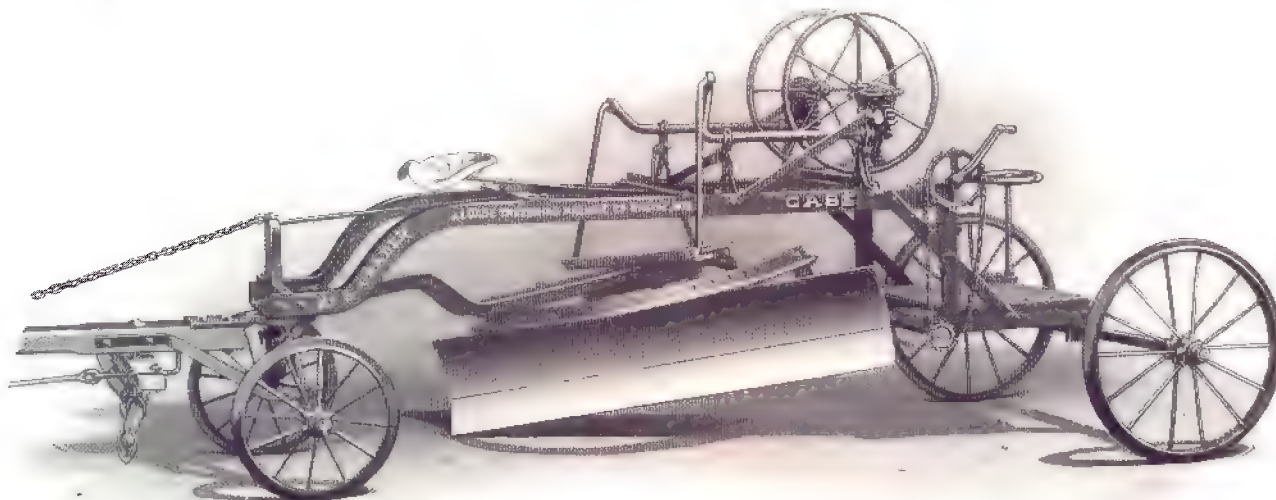
First of all, they are constructed of materials best suited to their requirements. For instance, the frame and braces are of 0.10 percent carbon steel; the moldboards

0.40 to 0.50 percent carbon open hearth steel; the edges from 0.60 to 0.80 percent carbon steel. All are of steel and malleable, except axle boxes and wheels, which are cast iron.

The front coupling, or fifth wheel, is ball-and-joint, which insures smooth running when the wheels travel over rough places.

The lateral adjustment of the blade is controlled by the operator on the platform. The blade can be thrown to and from its work while in motion. No dogs or linkages are in this adjustment to get out of order. The handle sets the blade permanently. In fact all adjustments are made at the operator's tips. There is no delay — no lost motion. His eyes are continually following his work.





No. 3 Grader

valuable feature is the steering engine hitch. This device enables the grader to work on the crown of the road while your power runs on the crown of the road. You know how much easier it is for your power to run on the crown of the road than if it were to travel in the ditch. This means a minimum of expense consumed, and these savings, small as they may seem, will during the season, add considerably to your profits.

Another feature of the No. 1 machine — one that saves power, time, and labor. It's the Case Grader equipped with steering gears and wire cables. With this device, two graders can be operated, one on each side of the road (see illustration) or in tandem, with the aid of but a single tractor. This doubles your work at practically the same cost as though but one grader were used.

Other features, which limited space does not allow

us to explain, are embodied in Case Graders. Each feature has in itself some time-, labor- and money-saving possibility. After all it pays, doesn't it, to buy a machine that is built by a concern whose reputation has never waned, and one whose products are meeting with the approval of both contractor and municipality alike? Case Graders come in three sizes: No. 1, for use with the tractor. No. 2 and No. 3, adapted to teams. These last two sizes, in construction and design, are in every respect built as carefully as our larger machines. They are a typical Case product.

If you are sufficiently interested in Case Graders and Good Roads, send for our handsomely illustrated Road Machinery Catalog. Here the details of all Road Machinery are explained by word and illustration. It's a book you'll like, and one worth keeping. Every township official interested in the welfare of his community and every contractor should have a copy. A free copy, sent postpaid, is yours for the asking.

*Prices quoted on pages 91 and 92*







## Case Road Drags



**T**HESE drags are constructed of an angle iron frame, thoroughly braced with running board for the convenience of the operator, who thus can change position of draft easily.

The blades are constructed of high carbon steel and are reversible so that when one edge is worn the other may be used. They are of ample weight and strength to easily withstand any load that comes on them by ordinary use. The vibrating bars and adjusting bars are separate from the main frame, and the leverage power from the locking device is three times that of the pressure of the load of material being moved by the drag. The load of material being moved by this drag can be dumped at any time by the hand lever. By this device a large portion can be dropped into chuck holes or depressions on the highways.

### *Wagons*

If you are interested in the subject of dumping or spreading wagons, our catalog describing completely the

line of Case wagons, will be sent at y  
wagons are backed by Case thorough  
tion, and are bound to be satisfactory in

### *Scrapers, Barrows, E*

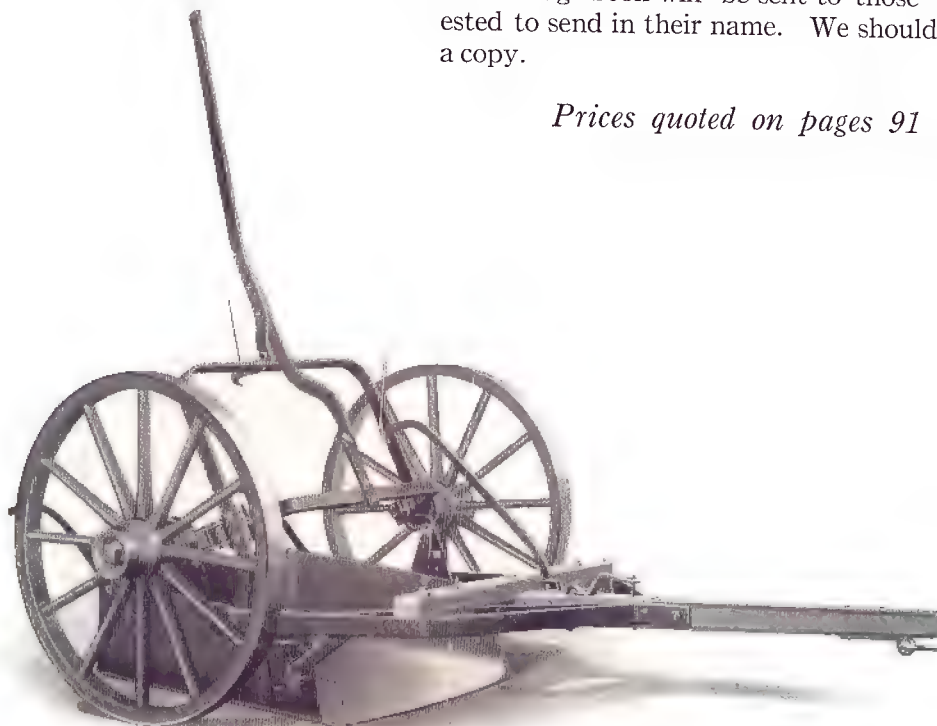
All the machines and tools necessary road making outfit are found in our line. Scrapers, Fresno Scrapers, Drag Scrapers, of all sorts and descriptions, are all described in our Road Machinery Catalog. May we have for one of these books? We believe you will find interesting material on the subject of road making

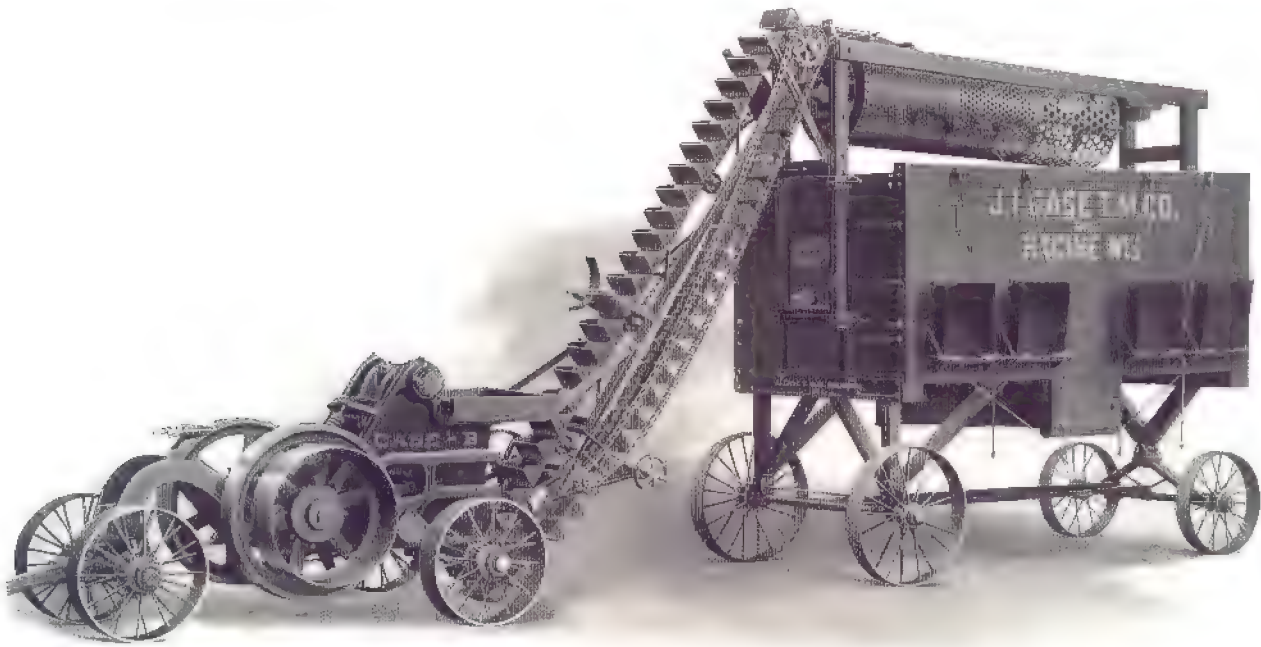


Fresno Scrapers are used in constructing ditches, land, etc. Our line of Fresno and Drag Scrapers complete, and sizes can be furnished to meet the necessary requirements.

Wheelbarrows also constitute part of the extensive line of Case Road Building products. Like all Case products these machines are built to measure up to a high standard. We have a special catalog on Case Road Machinery which explains the Case line in detail. This interesting book will be sent to those sufficiently interested to send in their name. We should like to send you a copy.

*Prices quoted on pages 91 and 92*





## Rock Crushers

exc  
bu  
Case Rock Crusher has proven its worth to  
both contractors and communities alike. Very  
sturdily constructed, it gives evidence of the way we  
build our road-building equipment.

They are built in two sizes. Size A, the smaller machine,  
has a jaw opening 15 inches long and about half as wide.  
It is mounted on wheels and has a capacity of 10 to 15  
tons per hour — weight three tons.

Size B, the larger machine, has a jaw opening 20 inches long and about 10  
inches wide. Being also mounted on wheels, it can be

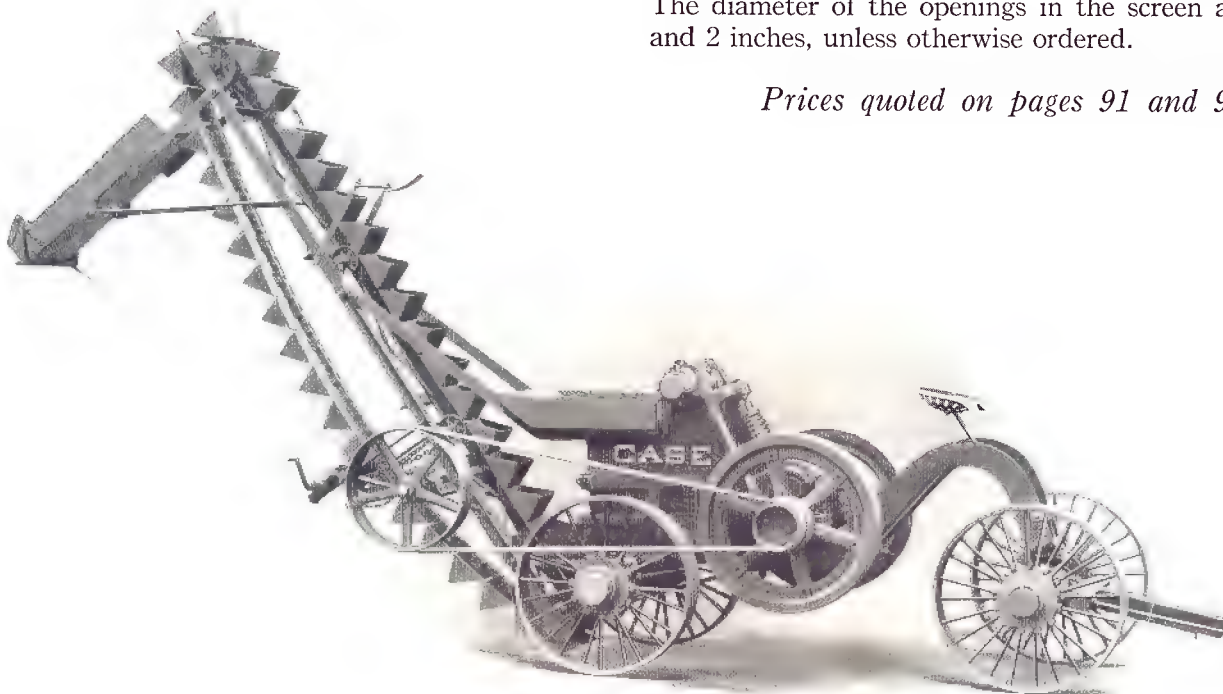
conveniently moved to any place desired. An elevator for  
elevating the crushed stone, which is adapted for use  
with our portable stone screen is provided with this  
size crusher. It is 7½ tons in weight and has a capacity  
of 15 to 25 tons per hour.

## Case Stone Graders

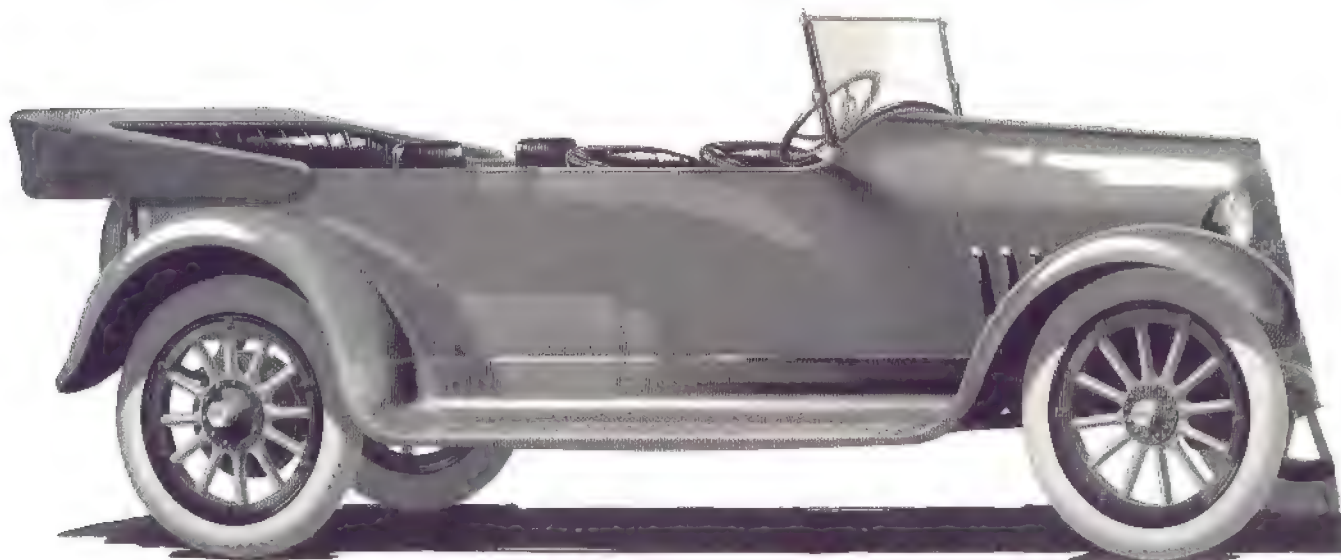
The bin is mounted in such a way that trucks can be  
removed when necessary. The revolving screen is raised  
above the bins by means of a crank so that its full  
capacity can be utilized.

The diameter of the openings in the screen are ½, 1¼  
and 2 inches, unless otherwise ordered.

*Prices quoted on pages 91 and 92*







## Case "40" Touring Car

IN the pioneer days of 1842, Jerome I. Case, as a youth, came "far" west. He started, then, a small workshop. From that modest beginning there has developed a great institution—known and respected the world over for the merit of its products.

During these years buyers throughout the world have been made happy by the excellence of Case products—from the simplest to those which solve the more difficult problems of power. In this more than three score years grandfather has advised father and father has passed the word on to son, and now son passes it on to son, that this honored name is his guaranty of excellence in design, sincerity in manufacture, and straightforwardness in sales.

The new Case "40" is introduced to the world—Case cars are found in Europe, South America—yes, in South Africa—as a car with an unusual pedigree. This fact means a whole lot in these days of adjustment in motordom.

The new Case "40" we say is Tomorrow's Car. You will be struck with its unusual lines—its blended, plastic modeling. You are bound to stop and admire it. You are bound to envy one's ownership.

Your first mile in this car will delight you with its unusual comfort. This is gained not alone by the use of cantilever springs, but by the Case way of suspending these springs from the rear axle so that they do only spring duty.

The divided front seats—the upholstery in real grain leather, which, by the way, is removable as a unit for cleaning or changing to another color—together with the

unusual room both in the front compartment and tonneau, will excite further praise.

Then when you come to test those parts beneath the hood in a hard pull or up a steep incline, or on the 100,000th mile, you will find the Case motor with the ring of the characterization—"the motor that makes extra cylinders unnecessary."

Such care in the planning of details is illustrated by the fact that all wiring is housed in waterproof, rustless, flexible conduits. The junction box between the body and the chassis also indicates the thoroughness which you will find in this car. By the way, we urge you to study minutely every part. Of course Westinghouse ignition, lighting, and starting equipment needs no further comment.

In announcing this car at the new price of \$1090.00 with the statement that it contains all of the merit of our earlier "40" which sold for \$2300.00 we give you proof of the progress which this Company has made in the automobile field. We have always stuck by those fundamentals instilled in the early workers of this Company by its founder.

In designing and building this car, we have thought of you who buy with an intelligent understanding of what makes value. Let us prove to you, if you will, what Case means by value. Preliminary data will be sent at your request. We welcome the opportunity of showing and explaining to you a car that we believe will appeal to your good judgment and good taste.

### Specifications of the Case 40

WHEELBASE: 120-inch.

MOTOR: Four cylinder, bore  $3\frac{3}{8}$  inch, stroke 6-inch, cylinders cast en-bloc, integral with crank case, L-Head, 40-45 B. H. P.

Ignition / Starting (Westinghouse. Lighting)

Lubrication — Force feed to crank shaft and cam shaft bearings, splash to piston pins and cylinder walls.

Carburetor — Of special design, with feed by gravity from cowl tank, dash adjustment.

Radiator — Cellular type, with thermo-siphon circulating system.

Clutch — Cone.

TRANSMISSION — Selective, three speeds forward and one reverse, three point suspension, in unit with power plant, left hand drive, center control, Timken bearings, and Spicer universal joint.

AXLES: Rear — Weston-Mott,  $\frac{3}{4}$ -floating, with spiral bevel gears, torque and drive thrust taken by torque tube to rear end of transmission through a ball-and-socket joint, pinion shaft provided with two Bock, roller-type bearings.

Front — I-beam, designed and built by Case, Timken bearings, I-beam section,

steering arms, steering knuckles, and king pins all of special chrome nickel steel, heat-treated, and machined in our shops.

FRAME: Designed with exceptionally deep section, greatest depth at center front hanger of cantilever spring is suspended.

SPRINGS: Rear — Cantilever, 50 inches long,  $2\frac{1}{4}$  inches wide, attached to rear by means of universal joints, which take all side play, allowing springs to spring duty, an exclusive feature in construction.

WHEELS: 34 x 4-inch, artillery type, with Goodyear detachable, demountable.

BODY: All steel, with removable upholstery of genuine grain leather. Front divided, and are adjustable forward and backward.

Finish — Brewster green, with ivory stripe.

MODELS: Touring car.

EQUIPMENT: One-man top, with dust hood and quickly adjustable side curtains.

Stewart-Warner Speedometer.

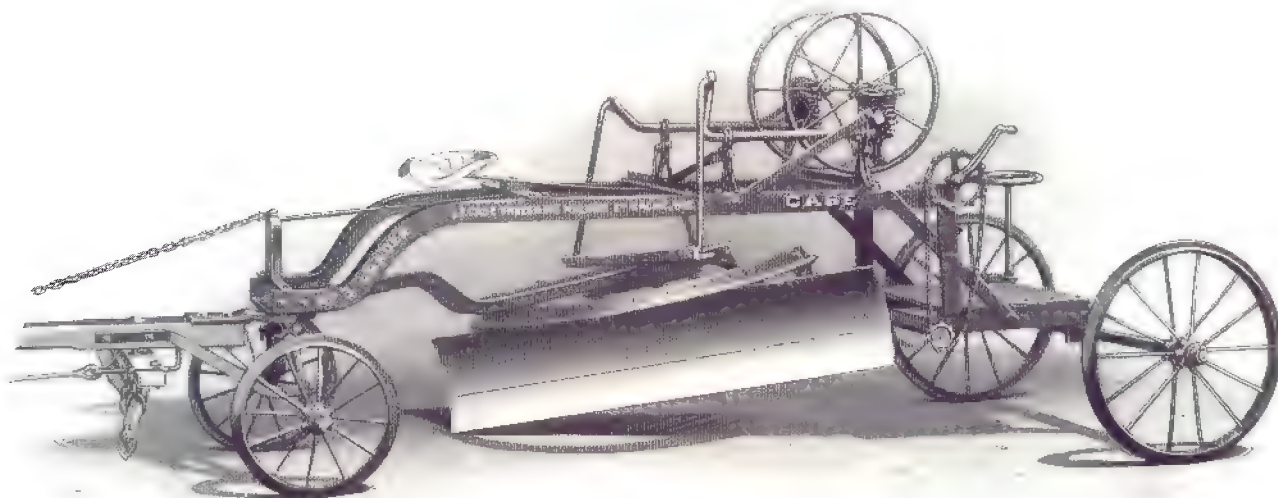
Windshield—rain vision, ventilating.

Tires — Goodyear 34 x 4-inch, Non skid on rear.

Motor driven horn.

Regular tools, tire repair kit, etc.

PRICE: \$1090.00.



No. 3 Grader

valuable feature is the steering engine hitch. This device enables the grader to work on the crown of the road while your power runs on the crown of the road. You know how much easier it is for your power to run on the crown of the road than if it were to travel in the ditch. This means a minimum of expense consumed, and these savings, small as they may seem, will during the season, add considerably to your profits.

Another feature of the No. 1 machine — one that saves power, time, and labor. It's the Case Grader with steering gears and wire cables. With this device, two graders can be operated, one on each side of the road (see illustration) or in tandem, with the aid of but a single tractor. This doubles your work at practically the same cost as though but one grader were used.

Other features, which limited space does not allow

us to explain, are embodied in Case Graders. Each feature has in itself some time-, labor- and money-saving possibility. After all it pays, doesn't it, to buy a machine that is built by a concern whose reputation has never waned, and one whose products are meeting with the approval of both contractor and municipality alike? Case Graders come in three sizes: No. 1, for use with the tractor. No. 2 and No. 3, adapted to teams. These last two sizes, in construction and design, are in every respect built as carefully as our larger machines. They are a typical Case product.

If you are sufficiently interested in Case Graders and Good Roads, send for our handsomely illustrated Road Machinery Catalog. Here the details of all Road Machinery are explained by word and illustration. It's a book you'll like, and one worth keeping. Every township official interested in the welfare of his community and every contractor should have a copy. A free copy, sent postpaid, is yours for the asking.

*Prices quoted on pages 91 and 92*





# Price List

**TERMS OF PAYMENT:** Ten percent discount from list prices where all cash is paid upon delivery, excepting such items marked

*All Prices Quoted in Catalog are F. O. B. Factory*

## Steam Tractors and Extras

Size	Simple
30-Horsepower, 7 $\frac{1}{4}$ x 10-inch Cylinder	\$1425.00
40-Horsepower, 8 $\frac{1}{4}$ x 10-inch Cylinder	1550.00
50-Horsepower, 9 x 10-inch Cylinder	1785.00
65-Horsepower, 10 x 11-inch Cylinder	2150.00
75-Horsepower, 11 x 11-inch Cylinder	2250.00
80-Horsepower, 11 x 11-inch Cylinder	2400.00
110-Horsepower, 12 x 12-inch Cylinder, including Straw-Burning Attachment and Cab.	2600.00
For Straw-Burning Attachment, including Jacket on Boiler, add \$60 to prices above.	
Jacket and Lagging on Boiler (except 110-Horsepower)	40.00
Engine Canopy A, B or C, 30 to 80-Horsepower	50.00
Traction Engine Brake	30.00 *
For Engine equipped at Factory with Oil Burner, add	100.00
For Rocker Grates, fitted on 40 and 50 H. P. Engines, add	25.00
Rocker Grates for same Engines in the Field	40.00 *
If freighting wheels are wanted on new engine instead of regular wheels, add \$100 to list price of engine.	
If municipal wheels are wanted on new engine instead of regular wheels, add \$125 to list price of engine.	
Extra heavy front wheels for freighting engine, add \$10.	
All Straw-Burning Engines are jacketed unless otherwise ordered.	

## Extension Rims

6-inch Extension Rims, per pair, for 25-Horsepower Gas Tractor without Grouters	\$ 50.00
6-inch Extension Rims, per pair, for 25-Horsepower Gas Tractor with Grouters	60.00
8-inch Extension Rims, per pair, for 25-Horsepower Gas Tractor without Grouters	65.00
8-inch Extension Rims, per pair, for 25-Horsepower Gas Tractor with Grouters	75.00
8-inch Extension Rims, per pair, for 30-Horsepower Steam Engine	75.00
8-inch Extension Rims, per pair, for 20-40-Horsepower Gas and Oil Tractor, 40-50 and 75-Horsepower Steam Engine	100.00
8-inch Extension Rims, per pair, for 30-60-Horsepower Gas and Oil Tractor, 65-Horsepower Steam Engine	120.00
12-inch Extension Rims, per pair, for 20-40-Horsepower Gas and Oil Tractor, 40-50 and 75-Horsepower Steam Engine	130.00
12-inch Extension Rims, per pair, for 30-60-Horsepower Gas and Oil Tractor, 65-Horsepower Steam Engine	140.00
12-inch Extension Rims, per pair, for 80-Horsepower Steam Engine	150.00
12-inch Extension Rims, per pair, for 110-Horsepower Steam Engine	150.00

## Freighting and Municipal Wheels for Engines in field

	Freighting	Municipal
40-Horsepower, per pair	\$405.00 *	\$430.00 *
50-Horsepower, per pair	430.00 *	455.00 *
65-Horsepower, per pair	485.00 *	510.00 *
75-Horsepower, per pair	500.00 *	525.00 *
80-Horsepower, per pair	540.00 *	565.00 *

## Contractor's Fuel Bunkers

Contractor's Fuel Bunkers for Engine in Field	\$110.00
Contractor's Fuel Bunkers on new Engine	80.00
Excepting 110-Horsepower.	

## Simple Portable Engines and Extras

Size	Simple
4-Horsepower, 6 x 8-inch Cylinder, coal and wood only	\$ 600.00
5-Horsepower, 7 $\frac{1}{4}$ x 10-inch Cylinder, coal and wood only	800.00
6-Horsepower, 8 $\frac{1}{4}$ x 10-inch Cylinder	900.00
7-Horsepower, 9 x 10-inch Cylinder	1000.00
8-Horsepower, 10 x 11-inch Cylinder	1150.00
9-Horsepower, 11 x 11-inch Cylinder	1300.00
For Straw-Burning Attachment, including Jacket on Boiler, add \$80 to price of engine.	
For Portable Engine	\$15.00 *
Jacket and Lagging on Boiler	40.00

## Skid Engines and Boilers

Size	Simple Skid Engine	Skid Boiler	Boilers on Wheels
30-Horsepower	\$625.00	\$450.00	\$550.00
40-Horsepower	750.00	500.00	600.00
50-Horsepower	825.00	550.00	650.00
65-Horsepower	1100.00	625.00	700.00
80-Horsepower	1200.00	700.00	800.00

## Gas and Oil Tractors and Portables

10-20-Horsepower Gas Tractor	\$ 890.00
12-25-Horsepower Gas Tractor	1425.00
20-40-Horsepower Gas and Oil Tractor (with cab and curtains)	2100.00
30-60-Horsepower Gas and Oil Tractor	2650.00
25-Horsepower Portable Gas Engine	900.00
40-Horsepower Portable Gas and Oil Engine	1200.00
"Self-Steering" Device for 10-20-Horsepower Gas Tractor	35.00
"Self-Steering" Device for 12-25-Horsepower Gas Tractor	45.00
"Self-Steering" Device for 20-40-Horsepower Gas Tractor	50.00
Extension Cab and Curtains for "40" Horsepower Gas and Oil Tractor (put on in the field)	50.00

## Old Abe Tractor Gang Plows

**WARNING** We want the public to understand that our plows are NOT the Case plows made by The J. I. Case Plow Works.

2-3 Bottom Light Tractor Gang	\$110.00
4 Bottom Heavy Duty, Automatic-Lift	240.00
6 Bottom Heavy Duty, Automatic-Lift	310.00
8 Bottom Heavy Duty, Automatic-Lift	68
Extra set of shares furnished free with Breaker Bottoms.	
Extra set of shares furnished for Stubble Bottoms at \$3.50* per share	

## Case Steel Threshing Machines and Extras

With trucks, but without Stacker, Brake or Hand-Feed Attachment.	
36-inch Threshing Machine, 18 x 22-inch Cylinder (12 bar)	\$400.00
42-inch Threshing Machine, 24 x 22-inch Cylinder (12 bar)	425.00
50-inch Threshing Machine, 28 x 32-inch Cylinder (20 bar)	510.00
54-inch Threshing Machine, 32 x 32-inch Cylinder (20 bar)	560.00
58-inch Threshing Machine, 36 x 32-inch Cylinder (20 bar)	615.00
62-inch Threshing Machine, 40 x 32-inch Cylinder (20 bar)	670.00
Peanut Threshing Machine (built only as 18 x 36-inch gear or belt), without hand feed, stacker and bagger	400.00
When ordering Threshing Machines be sure to state "belt" or "gear" and to give the dimensions as above.	
Give name of engine, diameter and number of revolutions of flywheel, in order that the proper size cylinder pulley may be sent to give cylinder its correct speed. 12-bar, 1,075; 20-bar, 750 revolutions per minute.	
Case Register and Steel Box	\$ 4.00
Hand-Feed Attachment	15.00
Threshing Machine Brake (give rear width of machine)	10.00
Grain Attachment for Peanut Threshing Machine	100.00
Pea and Bean Attachment for Peanut Threshing Machine	100.00
Both Grain Attachment and Pea and Bean Attachment for Peanut Threshing Machine	100.00
Bolster Jacks for Threshing Machines are furnished with gears.	
Threshing Machines with Spokane Feeders only.	

## Feeders and Band Cutters

For 36-inch Threshing Machine, 18 x 22-inch 12-bar Cylinder	
For 42-inch Threshing Machine, 24 x 22-inch 12-bar Cylinder	
For 50-inch Threshing Machine, 28 x 32-inch 20-bar Cylinder	
For 54-inch Threshing Machine, 32 x 32-inch 20-bar Cylinder	160.00
For 58-inch Threshing Machine, 36 x 32-inch 20-bar Cylinder	170.00
For 62-inch Threshing Machine, 40 x 32-inch 20-bar Cylinder	180.00
Number 8 Special Spokane Feeder	250.00
Number 9 Spokane Feeder with 16-foot Carrier	200.00
Universal Mounted Steel Extension Feeder Carrier	60.00

## Stackers

Case Wind Stackers with 46-inch rear and smaller	175.00
Case Wind Stackers with 50-inch rear and larger	250.00
In ordering Wind Stackers it is necessary to give number of machine. 6% discount for cash.	

*Prices in this Catalog Subject to Change Without Notice*

## All Prices Quoted in Catalog are F. O. B. Factory

### Case-Sattley Attached Swinging Stackers

For 36-inch Threshing Machine, 18 x 22-inch 12-bar Cylinder	\$200.00
For 42-inch Threshing Machine, 24 x 22-inch 12-bar Cylinder	200.00
For 50-inch Threshing Machine, 28 x 32-inch 20-bar Cylinder	210.00
For 54-inch Threshing Machine, 32 x 32-inch 20-bar Cylinder	210.00
For 58-inch Threshing Machine, 36 x 32-inch 20-bar Cylinder	210.00
For 62-inch Threshing Machine, 40 x 32-inch 20-bar Cylinder	220.00

### Common Folding Stackers Complete

For 36-inch Separator only 16-foot Common Folding Stacker is furnished. For sizes larger than 36-inch Separators, only 18-foot 22-foot, 24-foot Common Folding Stackers are furnished.	
16-foot, for 36-inch Threshing Machine only	\$50.00
18-foot, for all width Threshing Machines, except 36-inch	50.00
22-foot, for all width Threshing Machines, except 36-inch	58.00
24-foot, for all width Threshing Machines, except 36-inch	62.00
Case 18½-foot Side Stacker complete	75.00
Parts to change Common to Side Stacker	25.00

### Grain Registers, Loaders, and Baggers

No. 1 — Automatic Grain Register with bagging attachment or wagon spouts	\$75.00
No. 1 — Automatic Grain Register with both bagging attachment and wagon spouts	80.00
No. 2 — Dakota Style Automatic Grain Register	75.00
No. 4 — Short Tallying-Bagger	30.00
No. 5 — High Wagon Loader	50.00
No. 6 — Low Wagon Loader with bagging attachment or wagon spouts	65.00
No. 6 — Low Wagon Loader and with both bagging attachments and wagon spouts	70.00
In ordering Automatic Grain Registers, elevators, and baggers, state the number and width of rear of machine.	

### Clover Attachments

Consisting of four filled concaves, one blank, one sieve and two concave circles

For 18-inch Cylinder Threshing Machine	\$25.00
For 24-inch Cylinder Threshing Machine	30.00
For 28 x 46-inch Cylinder Threshing Machine	34.00
For 28 x 50-inch Cylinder Threshing Machine	35.00
For 3½-inch Cylinder Threshing Machine	40.00
For 36-inch Cylinder Threshing Machine	43.00
For 40-inch Cylinder Threshing Machine	46.00
For 44-inch Cylinder Threshing Machine	50.00

In ordering state diameter and width of cylinder, also width of rear of Threshing Machine.

### Recleaners

Recleaners for all size Threshing Machines complete elevators and bagging attachment or wagon spouts	\$175.00
Recleaners	50.00
Elevator for Clover Recleaner	25.00

Orders for recleaners should state sieves wanted or kind of grain and threshed. Four sieves or one adjustable sieve and a screen furnished.

### Dingee-Woodbury Powers

orsepower Metal Frame	\$180.00
orsepower Metal Frame	190.00
orsepower Metal Frame	200.00
orsepower Metal Frame	210.00
orsepower Metal Frame	220.00
	3.50 *

### Corn Shellers—F. O. B. Decatur, Ill.

No. 1, capacity per hour shelled corn, 1200 to 1800 bushels; price without feeder	\$525.00
With two-section feeder	640.00
No. 2, capacity per hour shelled corn, 700 to 1200 bushels; price without feeder	450.00
With two-section feeder	550.00
No. 3, capacity per hour shelled corn, 500 to 700 bushels; price without feeder	400.00
With two-section feeder	500.00
Extra 12-foot sections feeder	24.00

### Baling Presses

16 Baling Press, chamber 14 x 18	\$250.00
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Belt-power Baling Press, chamber 14 x 18	410.00
Belt-power Baling Press, chamber 17 x 22	450.00
Hay Fork Attachment	45.00

### Road Rollers

10-Ton Road Roller, Simple	\$2400.00
12-Ton Road Roller, Simple	2700.00
Convertible parts for Roller including front wheels and detachable grouters	125.00

### Engine Tenders, Trucks, and Extras

16-Barrel, Four-Wheel mounted on Steel Wheel Trucks	\$120.00
12-Barrel, Four-Wheel mounted on Steel Wheel Trucks	110.00
16-Barrel, Four-Wheel mounted Gasoline Tender mounted on Steel Wheel Trucks	130.00
16-Barrel, unmounted for Farm Wagon	70.00
12-Barrel, unmounted for Farm Wagon	60.00
16-Barrel, unmounted Gasoline Engine Tender	80.00
8-Barrel, Two-Wheel Tender	100.00
In ordering Engine Tenders state whether mounted or unmounted; if unmounted state width of wagon bolster, 38-inch or 42-inch.	
Trucks for Four-Wheel Engine Tender with Whiffletrees and Neckyoke, 12- or 16-Barrel	\$50.00
Steel Axles Furnished with Four-Wheel Engine Tender Trucks, extra	10.00
Brake for Four-Wheel Engine Tender Trucks	10.00 *
Case Tank Pump and Hose	13.75 *
Sprinkling Attachment	25.00
Case Gasoline-Tank Pump less Hose	8.50 *

### Dump Wagons

1½ Yard Wagon	\$110.00
2 Yard Wagon	115.00
Reversible 3 Yard Wagon	275.00
Reversible 3 Yard Spreader Wagon	315.00
1½ Yard Dump Box	37.50
2 Yard Dump Box	40.00

### Road Graders, Drags, Etc.

Case Steel Reversible Road Grader No. 1	\$250.00
Case Steel Reversible Road Grader No. 2	235.00
Case Grader No. 3	125.00
Shelby Grader	40.00
Steering Engine Hitch for Case Road Graders No. 1 and No. 2	30.00
Adjustable Engine Hitch, No. 1 and No. 2	15.00
Fuel Bunker for Case Road Grader No. 1	15.00
Adjustable Road Drags, 33 inches. Frame 8 feet	25.00
Adjustable Road Drags, 33 inches. Frame 10 feet	30.00
Adjustable Road Drags, 42 inches. Frame 8 feet	28.50
Winner Road Drags, 33 inches. Frame 8 feet	15.00

### Rock Crushers, Screens and Bins

Size "A" Rock Crusher with 16-foot Elevator and Spout Screen, mounted on Wheels	\$ 950.00
Size "B" Rock Crusher and 16-foot Elevator, mounted on Wheels	1275.00
16-foot Elevator and Spout Screen for "A"	175.00
16-foot Elevator for "B"	175.00
Trucks	100.00
Extra Length Elevators, per foot	7.50
Portable 15-ton Bin and Stone Screen	500.00
Bin and Trucks	300.00
Screen	200.00

### Scrapers

No. 1 Wheeled Scraper	\$32.00
No. 2 Wheeled Scraper	40.00
No. 2½ Wheeled Scraper	45.00
No. 3 Wheeled Scraper	60.00
No. 1 Drag Scraper	5.00
No. 2 Drag Scraper	5.00
No. 3 Drag Scraper	4.75
No. 1 Fresno Scraper	15.00
No. 2 Fresno Scraper	14.50
No. 3 Fresno Scraper	14.25

### Case Automobiles

4-H P. Touring Car	\$1900.00
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Prices in this Catalog Subject to Change Without Notice



# Case Steam Engines

## Comparative Dimensions for 1916

Horsepower	CYLINDER					FLYWHEEL				BOILER									
	SIMPLE		COMPOUNDED			Normal Speed — Revolutions per Minute	Diameter — Inches	Face — Inches	Barrel Diameter — Inches	FIRE-BOX				TUBES			Heating Surface Square Feet above Grates	S. P. — lb. per sq. in.	
	Diameter — Inches	Stroke — Inches	High Pressure — Diameter — Inches	Low Pressure Diameter — Inches	Stroke — Inches					Length — Inches	Width — Inches	Height — Inches Above Grate	Grate Area — Square Feet	From top of Grate to bottom of Ash Pan — Inches	Number	Diameter — Inches			Length — Inches
18	6	8				250	36	7	22	26	20	25¼	3.6	10½	30	1¾	54	80.9	1
30	7¼	10				250	36	9½	26	30	23¼	30½	4.81	10½	36	1¾	67	119.4	15
40	8¼	10	6⅛	9	10	250	40	10½	28	34¾	25¼	30	6.09	13	32	2	84½	144.1	15
50	9	10	7	10	10	250	40	12	29	39½	25¼	30	6.9	13	38	2	90½	178.8	150
65	10	11				250	40	12¼	32¼	43¾	29	31	8.81	14⅝	47	2	96½	229.4	150
75	11	11	9¼	13	11	250	40	12	34	44	30¾	30¾	9.4	13	58	2	96½	282.6	140
80	11	11	9¼	13	11	250	40	12¼	34	44	30¾	34	9.35	15	56	2	100½	283.1	150
110	12	12				230	43¾	16	38	49½	35¼	36	12.06	12½	76	2	100½	385	160
R.R.	8¼	10	6⅛	9	10	250	36	9½	26	35	23¼	30¼	5.62	12¾	29	2	84½	132.4	150

Horsepower	TRACTION ENGINES														Capacity of Common Tank — Gallons	Capacity of Cont. F. B. Tank — Gallons
	FRONT WHEELS		REAR WHEELS			Miles Per Hour at Normal Speed of Engine	Distance Between Axles — Feet and Inches	Width Overall with Regular Wheels — Feet and Inches	Length Overall with Regular Tank — Feet and Inches	Length Overall with Contractor's Fuel Bunkers — Feet and Inches	Height Overall — Feet and Inches					
	Diameter — Inches	Width — Inches	Diameter — Inches	Width — Inches	Extension Rims Width — Inches											
30	42	8	60	14	8	2.4	8- 2	6- 1½	14- 3½	15-11¾	9- 3	54	113			
40	44	10	66	18	8 or 12	2.35	9- 5¼	7- 4¾	15- 5	18-0½	9- 7	81	172			
50	44	10	66	20	8 or 12	2.30	10- 6	7- 5⅝	16- 5½	18-6	10- 0	81	194			
65	48	12	72	20	8 or 12	2.4	11-10	8- 3¼	18-11½	21-0	10- 1¼	106	219			
75	44	12	66	24	8 or 12	2.52	11-10¼	9- 4¼	17-10	21-1	10- 2¼	95.5	260			
80	48	14	74	24	8 or 12	2.39	11-10¼	8- 9	19-10½	21-4½	10- 4	106	252			
110	53	16	84	36	12	2.37	12- 2¾	10- 9¼	.....	22-8½	10-11½	.....	366			
R.R.	41	50	72	20	.....	2.25	10- 0	6- 9¾	.....	18-5	10- 1½	.....	208			

Horsepower Engine	BOILERS					TRACTION ENGINES									
	Thickness of Boiler Barrel Sheet — Inches	Thickness of Fire Box Sheets and Wagon Top Sheets — Inches	Thickness of Tube Sheets — Inches	From top of Crown Sheet to inside of Wagon Top — Inches	Diameter of Rear Axles — Inches	Diameter of Crank Shaft — Inches	Diameter of Countershaft — Inches	Length of Connecting Rod — Inches	Differential Gear — Width of Face — Inches	Gears on Trac- tion Wheel — Width of Face	Contractor's Fuel Bunkers — Height of Draw- Bar from Ground — Inches	Common Tanks — Height of Draw-Bar from Ground — Inches	Brake Horse- power	Draw-Bar H. P. 50 to 75 per cent of H. P. of Engine	
18	1/4	5/16	7/16	8 3/4	3 1/2	2 3/16	2 15/16	26	2 3/4	3 1/2	18	16 1/4	18	15 to 23 H. P.	
30	1/4	5/16	7/16	11 1/2	3 3/4	2 11/16	2 15/16	32	3 3/4	3 3/4	17	17	30	20 to 30 H. P.	
40	1/4	5/16	7/16	12 1/2	3 1/2	2 11/16	3 1/16	32	3 3/4	4 1/2	17	17	40	25 to 38 H. P.	
50	1/4	5/16	7/16	13 1/2	4 1/2	3 1/16	3 15/16	36	3 3/4	5 1/2	21	18	50	33 to 50 H. P.	
65	1/4	5/16	7/16	14 1/2	4 7/8	3 7/16	3 7/8	36	4 1/4	6	20	32	65	38 to 56 H. P.	
75	1/4	5/16	7/16	14 3/4	6	4 1/16	4 7/8	36	4 1/4	6 3/4	17		75	40 to 60 H. P.	
80	1/4	5/16	7/16	15 1/2	6	4 1/16	4 7/8	38	4 1/4	6 3/4	17		80	55 to 83 H. P.	
110	1/4	5/16	7/16	11 1/2	3 1/2	2 11/16	3 3/16	32	3 3/4	3 3/4	20		110	20 to 30 H. P.	
R. R.	1/4	5/16	7/16	11 1/2	3 1/2	2 11/16	3 3/16	32	3 3/4	3 3/4	20		40		

## Case Gas and Oil Tractors

CYL-INDERS		BELT PULLEY		FRONT WHEELS		REAR WHEELS			Distance Between Axles — Feet and Inches	Width Overall without Extension Rims — Feet and Inches	Highest Point of Tractor — Feet and Inches	Height from Ground to Draw-Bar—Inches	Height from Ground to Operator's Platform — Inches	Height from Ground to Center of Crank shaft — Feet and Inches	Length Overall— Feet and Inches	Road Speeds at Normal Engine Speed — Miles Per Hour	CAPACITY OF FUEL TANK GASOLINE KEROSENE		Gal
Diameter — Inches	Stroke — Inches	Normal Speed Revolutions per Minute	Diameter — Inches	Face — Inches	Diameter — Inches	Width — Inches	Diameter — Inches	Width — Inches									Extension Rims — Inches	Gasoline Gallons	
4 1/4	6	800	17	6 1/2	30	8	52	22 & 10	6-4	5-7	5- 0	11	21 1/4	2-3 1/2	12-6	2	11	26	1
7	7	600	22	7 1/2	38	8	56	18	7-6	6-1	6- 0	18	24	3-8 1/2	12-4 3/4	2 1/2	11	26	1
9	9	475	24	8 1/2	40	10	66	20	9-6	8-4	8-11	24 1/2	30 3/8	4-7	14-9	2 1/2	11	26	2
12	12	365	32	12 1/2	42	12	72	24	10-6	8-9	10- 6	22 3/4	47	4-9	18-7	2	22	90	2

1. GEARS	BULL PINION		DIFFEREN'L SPUR GEAR		CR'NK SH'FT PINION		1ST REDUC-TION SHAFT GEAR OR PINION		1ST REDUC-TION SHAFT Diameter — Inches	Chain — Pitch — Inches	Differential Shaft Diameter — Inches	Rear Axle Diam-eter — Inches	Main Engine Bear-ings — Inches	Crank Pin Bear-ings — Inches	Piston Pin — Inches	Capacity of Cool-ing System — Gallons
	Circular Pitch — Inches	Face — Inches	Circular Pitch — Inches	Face — Inches	Circular Pitch — Inches	Face — Inches	Circular Pitch — Inches	Face — Inches								
1 1/2	2 1/4	4 D. P.	2	1 1/2	3	1 1/2	1 3/4	3 1/2	2 1/2	2 1/2	2 1/2	3 1/2	2 1/2	2 1/2	1 1/2	1
1 1/2	3	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	3 1/2	2 1/2	2 1/2	1 1/2	1
1 3/4	4 1/2	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	3 1/2	3 1/2	3 1/2	4 1/2	3 1/2	3 1/2	2	2





## Branch Houses

*Where Stocks of Machinery, Automobiles, Repairs and Supplies are Carried  
for Quick Delivery*

### *United States*

CALIFORNIA: San Francisco.  
COLORADO: Denver.  
GEORGIA: Atlanta.  
ILLINOIS: Chicago, Peoria, Freeport.  
INDIANA: Indianapolis.  
IOWA: Des Moines, Sioux City, Mason  
City, Waterloo.  
KANSAS: Great Bend, Wichita.  
KENTUCKY: Louisville, Lexington.  
MICHIGAN: Lansing.  
MINNESOTA: Minneapolis, Duluth, Man-  
kato, Fergus Falls.  
MISSOURI: Kansas City, St. Louis.  
MONTANA: Billings, Great Falls, Lew-  
istown, Glasgow.  
NEBRASKA: Lincoln.

NORTH CAROLINA: Greensboro.  
NORTH DAKOTA: Fargo, Dickinson,  
Beach, Bismarck, Williston, Minot,  
Devils Lake, Grand Forks.  
NEW YORK: New York City, Syra-  
cuse.  
OHIO: Columbus.  
OKLAHOMA: Oklahoma City, Enid.  
OREGON: Portland.  
PENNSYLVANIA: Harrisburg.  
SOUTH DAKOTA: Aberdeen, Sioux Falls,  
Watertown, Lemmon.  
TENNESSEE: Nashville.  
TEXAS: Amarillo, Dallas.  
UTAH: Salt Lake City.  
WASHINGTON: Spokane.  
WISCONSIN: Madison, Oshkosh.

### *Canada*

ALBERTA: Calgary, Edmonton.  
MANITOBA: Winnipeg, Brandon.  
ONTARIO: Toronto.  
SASKATCHEWAN: Regina, Saskatoon.

### *Foreign*

RUSSIA: Odessa.  
SOUTH AMERICA: Buenos Aires, Rosa-  
rio, Bahia-Blanca, Montevideo.  
FRANCE: Paris, Bordeaux.

### *Foreign Agencies*

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MEXICO: Guadalajara, Monterey.  
CHILI: Valparaiso, Talcahuano, Santi-  
ago, Concepcion, Valdivia, Coquimbo.  
HUNGARY: Budapest.  
BULGARIA: Widin.

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at Racine, Wisconsin, U. S. A.*

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